CIS Anti Report

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The Ford Motor Company

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Far right: Henry II

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The Ford Motor Company is in the business of making money out of carworkers. To do this it mounts a constant three-pronged attack: on wages, on productivity levels, and on workers' attempts to organise themselves.

In order to extract greater productivity (more work for the same pay) from its employees, Ford plays workforces off against one another. This has traditionally been done by playing section against section, black worker against white worker, immigrants against nationals, skilled worker against unskilled worker, women against men. The increased globalisation which is the hallmark of current Ford strategy has now added a new dimension to the company's offensive.

Complementation – the assembly of a single product or model from components made in many different countries and plants – has been developed further by Ford than by any other company. This enables Ford to manipulate its employees in many different countries as a single workforce geared to a single programme. In the battle between workers and company the workers remain fragmented organisationally by geography and nationality. Ford, on the other hand, benefits from its centralised control of management strategy.

In Europe, for example, the UK workforce is threatened with an embargo on further UK investment unless continental levels of productivity are achieved. Dagenham workers are told that it takes them 75% longer than Genk (Belgium) workers to produce the Cortina. Halewood workers are told that their record in meeting production targets is abysmal compared to continental plants. Meanwhile, German Ford workers are told that their plants are less profitable than those of the UK or Spain owing to the appreciation of the Deutschmark!

At every turn the ultimate threat is of unemployment. The company works hard at fostering an image of national identity wherever it operates, representing itself as a local employer and exporter, with the country's interests at heart, and playing down the fact that its subsidiaries are controlled from the USA. Meanwhile the host governments actively support and complement its attack on the workforce. Wage increases are called inflationary, and government wage freezes cited to justify their refusal. Tax incentives and subsidies abound as national governments compete for Ford's favours. Ford flourishes in Europe while European car firms struggle to survive. The company's ability to make record profits at the expense of European workers and national economies gives us some indication of Ford's far greater muscle when dealing with countries of the Third World in Latin America and South East Asia, Ford's other arenas of complementation investment.

The Ford Motor Company wages war on its workers in order to increase its profits. Each victory won by the company, each productivity deal squeezed out of a weak plant and then used as a precedent to attack other plants, means bigger bonuses for the multi-millionaires of top management, increased dividends from their enormous shareholdings. And each defeat sustained by the workforce means more inhuman working conditions, a greater subordination to the tyranny of the assembly line, and a shorter route to the human scrapheap which is as integral a part of every Ford factory as a slagheap to a coalmine.

The American Road

The North American Motor Industry is undergoing a unique crisis. It is an evolutionary crisis, a chrysalis change. For major monopolists, GM and Ford are embarking on a radical restructuring of their global operations

'A sixth of US jobs, a sixth of GNP, a sixth of every retail dollar is locked into the auto industry. A fifth of American steel, a third of zinc, a tenth of aluminium, two thirds of rubber is tied to autos' (Rothschild).

Between 1977 and 1985 the American auto industry is expected to spend something like $55 billion on capital investment in its home base. This is double what the nation spent in putting a man on the moon. As befits the leader in the domestic market, General Motors will be spending the lion's share, a stupendous $31.5billion. The Ford Motor Company, with an estimated $2billion home investment each year between 1977 and 1985 should notch up a total of $18billion. Chrysler will come in a modest third at $6.3billion. (*Automotive News* 21.11.77)

This, by far the greatest investment programme in the history of the industry, marks a totally new phase of production and competition aimed at downsizing the entire model range of all the companies in order to meet federal legislation on fuel economy. It is also aimed at dealing with the growing threat of imported cars, mainly Japanese, which have penetrated the USA market in 1977 to a record level of nearly 20%. And, of course, they are all embarking on the investment programme in order to stay competitive with each other.

Competition has always been the main stimulus to change in the auto industry, and as the pace has hotted up the weaker operations have gone to the wall. From the hundreds of small workshops producing cars in the first decade of this century, the field has narrowed down to three major producers, General Motors, Ford and Chrysler, with American Motors hanging on as a shaky fourth which may well not survive this latest surge of competition.

Productivity

The North American motor industry is undergoing a unique crisis. It is an evolutionary crisis, a chrysalis change. The major monopolists, GM and Ford, are embarking on a radical restructuring of their global operations. The ramifications of this restructuring are so extensive as to require a reappraisal of what we mean by a multinational company, its power to affect people's lives, and its relationship with the state.

Both Ford and GM are geared overwhelmingly to the manufacture of vehicles – in Ford's case over 90% of turnover comes from vehicle sales. The mainstay of production remains the classic assembly line developed by Henry I, on which large numbers of production workers perform short repeated cycles of movements. Vast plants such as Ford's at Rouge, Michigan, and GM's at Lordstown, Ohio, utilise basically the same approach as in Henry 1sts original plant at Mack Avenue, Detroit, where the first Model A's were produced. **Despite computerisation, welding robots, and three quarters of a century of technical innovation, car manufacture is still firmly dependant on the line worker.** With 19 North American plants operating on this principle, there is no way in which Ford can restructure production techniques from the bottom up – even if the technology were available for complete automation.

Saturation

The other consideration limiting the futher development of Fordism is the human element – the limitations and resistance of the assembly workers themselves. The work cycles, movements and operating speeds imposed on the line worker have been refined over the years to the point where the attempt to screw further ounces of effort and productivity are as likely as not to be counterproductive, through deteriorating work, ill health, absenteeism, or active resistance.

Between 1919 and 1930, productivity in the US auto industry increased by an average 8.6% p.a., while for US industry as a whole the figure was only 1.9% p.a. Between 1960 and 1971 however, the average auto industry productivity increase was down to 3%. It has since dropped below 2%. (Rothschild) While the 'flow-line' industries such as oil and chemicals, and the younger manufacturing industries such as electronics increase their productivity growth from year to year in response to technological innovations, the auto industry is, in productivity terms, over the hill.

Sloanism, the science and psychology of selling cars and creating markets, is reaching a parallel impasse. This does not mean that the North American market is dead – far from it. The US still provides over 50% of sales and profits for Ford and 80% for GM. Over 10million cars are sold in the USA every year, but 8million of these are replacements. A central aim of marketing policy in the industry has been to create the appearance of new models every year. A large proportion of trade is with companies with large fleets of cars and car-hire firms, who see it in their own competitive interest to always have the most recent models available. But now the market is reaching saturation.

In 1920 there was one car for every 13 Americans, men, women and children. In 1930 this was up to one car per 5½ Americans. In 1950, one car per 3¾ Americans. In 1970, one car per 2¼ Americans. In terms of growth, the heyday of the US car industry at home was the 20s and 30s. By the time of the Great Depression the US had achieved a level of car ownership that the UK only reached in 1966, and Holland only reached in 1970.

To market saturation as a hindrance to growth, is currently added the rocketing costs of car ownership. In many areas of the USA over the last two years auto insurance costs have gone up 50%. As list prices, interest rates, fuel and repair bills all increase, the private owner is becoming less likely to trade in his car after owning it for only a short time.

Competition

USA Advertising Expenditure
Cars and Trucks – 1975-1976

US$	*1976*	*1975*
General Motors	247,591,300	175,443,983
Ford	159,413,600	108,662,400
Chrysler	79,100,000	63,910,000

The advertising costs on a 'per car' basis are an important part of price competition. In 1976 these were:

GM $40.19, Ford $56.18, and Chrysler $67.28

(Advertising Age)

On the home front competition has never been so fierce. Advertising expenditure is at new record levels.

Ford's advertising for the Autumn of 1977 is 60% geared to TV, and no expense has been spared – they even brought in the special effects man from 'Star Wars' to do the TV commercial for the new Zephyr.

But despite the enormous sums spent on advertising, despite the attempt to compete throughout the model range and despite the efforts of 5000 Ford PR men, the fact remains that Ford's share of the American market is contracting.

Retail Car and Truck Sales in
US and Canada
Ford market shares (%)

	USA		*Canada*	
	Cars	*Trucks*	*Cars*	*Trucks*
1970	26.4	37.3	23.0	35.7
1971	23.5	35.2	21.6	34.0
1972	24.3	34.2	21.8	30.8
1973	23.5	32.8	21.6	31.1
1974	24.9	32.5	22.0	31.6
1975	23.6	31.5	22.0	33.2
1976	22.6	30.9	19.6	32.0

Between 1970 and 1975 GM's market share was as follows:

	USA		*Canada*	
	Cars	*Trucks*	*Cars*	*Trucks*
1970	39.7	38.2	30.2	35.7
1975	43.3	41.1	40.4	40.8

(Automotive Task Force, April 1977)

Profitability

The near saturation of the market in the USA aggravates the falling rate of profits experienced by all the auto majors. There are a number of ways of expressing this. Straightforward profit figures are not a good indicator, as they tell us nothing about the relationship between profits and the size of the operation in terms of sales, assets, share capital etc. **However, all the indicators demonstrate a fall in the rate of return, and this is true for all four of the large US motor manufacturers.**

What these show most clearly is that the Ford Motor Company along with the other major auto firms is showing a decline in profitability. Ford's profitability has, at least since the early sixties, been significantly and regularly below that of General Motors, and the auto industry as a whole is now beginning to be less profitable than manufacturing industry as a whole.

Ford's inferiority to GM has been largely attributable to GM's vastly larger capital base, and its ability to profit from a wider range of models and a concentration on the large car sector where profit margins are highest: Ford has also suffered more than GM from the increasing penetration of the US car market by imported cars, particularly from Japan.

Imports

The imports' % has increased as follows:

1965	6.3
1966	7.4
1967	9.4
1968	10.6
1969	11.3
1970	14.8
1971	15.1
1972	14.6
1973	15.2
1974	15.8
1975	18.2

Although 1977 has been a record year for vehicle sales in the US, the great bulk of the increase has come from the importers. October 1977 was the 8th consecutive month in which imports smashed all records. The first ten months of the year saw total imports of 1,781,000 – up 41.08% on the same period in 1976. Import penetration for the 10 months was 18.75% of the market, and in several months in 1977 penetration has been almost 20%.

Ford, which for years extolled the virtues of competition and the free enterprise system, is now sufficiently worried by imports to be talking about the possibility of import tariffs to protect the home producers.

Ford, like the other American manufacturers, hopes that the hugely expensive downsizing programme will win back some of the ground gained by imports. The other major reason for downsizing is to comply with government legislation on fuel efficiency. Average consumption across all model ranges has to be no less than 27.5 miles per gallon by 1985 – up from 18 mpg at present. The new 1978 models are already smaller, lighter and more fuel efficient than many of the 1976 models. 'Cutting the weight of cars is going to be all the harder because of tougher safety and pollution laws that force the manufacturers to add new equipment to their models. The days of the eight cylinder car are almost at an end and four, rather than six cylinder engines may well become dominant before long' (*Times*, 28.11.77).

The 'Big Four' Motor Vehicle Manufacturers in USA
Annual Rates of Return:

Net Profit divided by Total Assets %

	General Motors	*Ford*	*Total Industry*	*All Manufacturing Corporations*
1968	12.4	7.0	9.6	8.7
1969	11.5	5.9	8.1	7.1
1970	4.3	5.2	3.6	5.0
1971	10.6	6.3	7.8	5.5
1972	11.8	7.5	9.1	6.5
1973	11.8	7.0	9.1	7.9
1974	4.6	2.5	3.0	6.1
1975	5.8	2.3	3.0	7.7

Source: Calculated from financial statements.

All manufacturing corporations ratios compiled from US Federal Trade Commission *Quarterly Financial Reports* 1971-75 and US IRS *Statistics of Incomes* 1960-70.

The World Outside

Ford is fighting to maintain its share of a restricted market in the USA. A drop in import penetration, and the possible collapse of American Motor Corporation and fallback of Chrysler may take the pressure off for a while.

In 1950, the world production of vehicles totalled 7.8million, of which 85% were produced in North America. By 1971 world production had reached 21.7-million, of which 41% were produced in North America. World production in 1976 was 37.5 million, with only 34.7% coming from North America. **The USA is still undoubtedly the hub of the world's motor industry.** Geographically it is still the larget single market, and the American producers are, with their overseas subsidiaries, still taking the largest slice of the overall cake. Ford had the highest number of European registrations in 1976 (11.9%), while GM came fourth with 11%, after Renault and Peugeot/Citroen with 11.5% each. **All the indications are that Ford, while continuing to struggle for its share of the US market, will concentrate its search for real profits growth in the strongest area of its activities – the overseas operations.**

In 1976 Ford's International Automotive Operations division sold 1.8million cars and trucks. These sales totalled $7.9billion, or 28% of total Ford Motor Company sales. Pretax profits on these sales were $705million, or 41% of total profits. Ford makes or assembles cars in 18 countries, and distributes auto products through 3,860 dealers in 200 countries. For the last 5 years Ford overseas retail sales have been more than 8% higher than GM's.

Ford's worldwide penetration was 8.4% of the total market in 1975, 9.5% in 1976, and 10.3% in the first quarter of 1977. The Company estimates that total overseas sales will be 1.9million units for the whole of 1977.

The industry has for a number of years been talking about the 'world car' and

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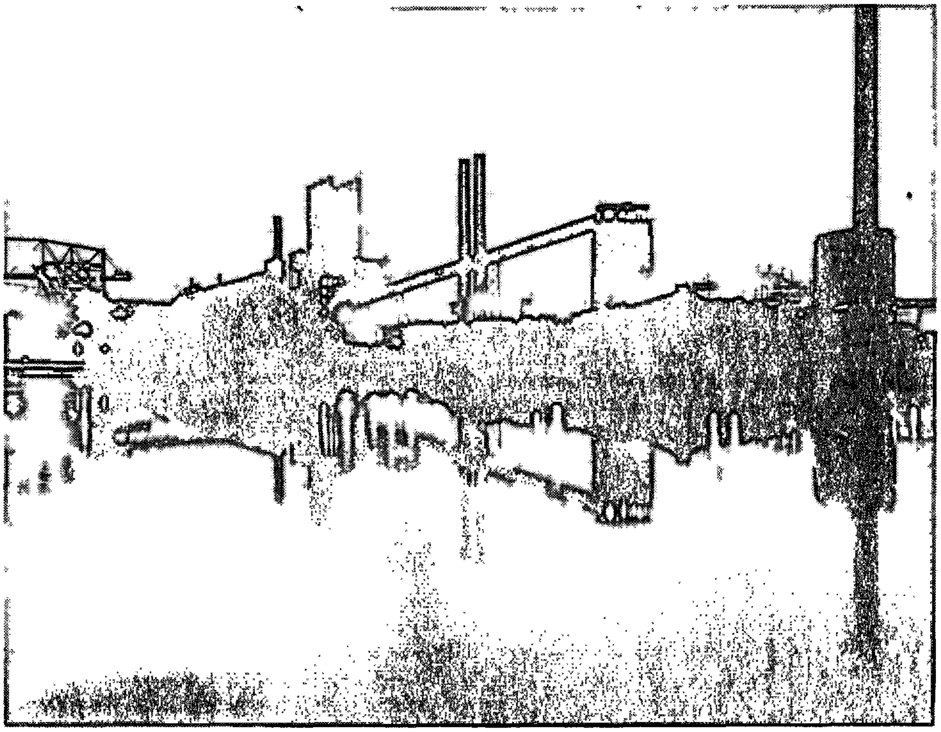
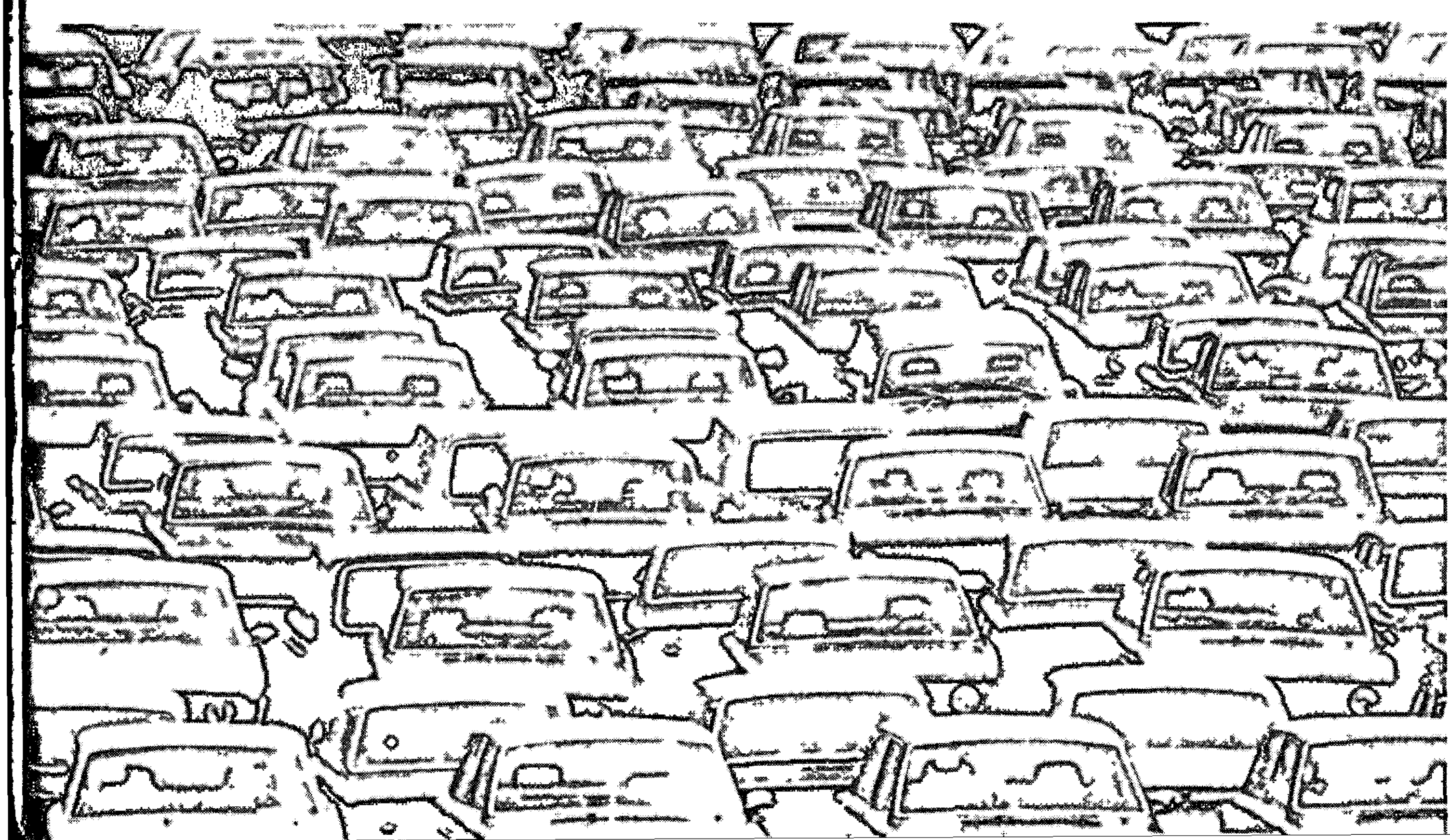




world complementation. It now seems likely that the Ford Motor Company will be the first of the auto companies seriously to embark on this development.

'The day is not far off when manufacturers — and especially auto manufacturers — will be producing the same line of products for sale everywhere in the world, with only the most minor variations among countries' said William O. Bourke, executive vice president of Ford North American Automotive Operations in November 1976. He went on to explain that the reason for worldwide consolidation of automotive products was the 'emergence' of a single world market with a single 'world style' in consumer preferences. He saw as reasons for this the 'homogenizing of consumer tastes' through modern communications, and the economics of transnational production which would 'make the single-world products less expensive'. Or more profitable, depending on which way you look at it.

Bourke firmly indicated a recurring theme of Ford decision makers when he stated that the growth market is overseas, and more than half of all vehicle sales now take place outside the United States. 'And, to take a longer look, while those sales are mostly in developed countries, no fewer than 72% of the world's people live in the less developed countries. These countries aren't going to stay undeveloped for ever.' (*Automotive Industries*)
15.11.1976).

Henry Ford has already mentioned a new front-drive Escort to be launched in 1981 to replace the Pinto in the US. (*Automotive News*, May 1977) The car will also be built and sold in Europe, and there will be little or no difference between the European and American models. Although the Fiesta was described as a world car, and is sold in the US, it was never planned to produce it in the States, and it will be phased out of the US market when the new Escort comes in. It may well have been promoted and sold in the US mainly in order to improve the Ford mile-per-gallon averages for the 1977/8 deadline of the Federal legislation. It will have served its purpose by 1981 when the Pinto replacement can take over, and foreign built cars will no longer be eligible for inclusion in fleet averages anyway.

The new rationalisation programme in the USA, on which Ford will be spending $2billion a year until 1985, will give the home base the strength necessary for a radical overseas reorganisation.

We show elsewhere in this report how the operations of the Ford Motor Company influence the lives of its workers, and help distort the economies of the less developed countries. The company's relationship with the government of the USA is based on its economic strength and its political muscle. The relationship is intimate and mutually beneficial. Ford benefits from the influence it can bring to bear on internal legislation and controls, and, also, overseas, from the diplomatic 'protection' of its economic interests.

It is, for example, one of the US manufacturers operating in South Africa whose interests have moved the US to oppose complete trade sanctions against the apartheid regime. The US government, in turn, benefits from the political and propaganda role Ford plays in other countries. The motor car, after all, is perhaps the most apposite packaged symbol of the American way of life. And Ford has aided the aims of the US government in more concrete ways too.

Sabotage

In October 1971 US Secretary of State William Rogers told a closed meeting of executives from ITT, Ford, Anaconda, Purina, First National City Bank, Bank America, and others, that 'the Nixon Administration is a business Administration. It's mission is to protect American business'. The subject under discussion was the new government of the Marxist Salvador Allende in Chile. According to John Petty, Assistant Secretary of the Treasury, this was to be 'a new ball game with new rules'.

The new rules included cutting off of Export-Import Bank credits on which depended vital imports from the US, and pressuring multinational institutions such as the World Bank (under ex-Ford president Robert McNamara) and the Inter-American Development Bank to disapprove further loans. The corporations, including Ford, joined the campaign as instructed by refusing to sell vital spare parts for trucks and machinery, even for cash. Thus Ford was directly involved in the economic sabotage of the Allende regime leading to its overthrow and the imposition of the current fascist regime.

Global expansion and rationalisation can only increase the power of multinationals to influence political developments, a trait that has not gone unnoticed in the corridors of power. The US National War College Strategic Research Group has produced a study which concludes that, 'the phenomenon of growing multinational enterprise, preponderantly American, can play a major role in improving our overall political, military and economic strength.'

Global corporations are seen as the engines building 'the economic strength of the Free World'. The study proposes a political strategy in which MNC's have a clearly defined role in the 'proliferation of the American system of values and way of life.' It continues, 'If we wish our values and life styles to prevail, we are obliged to compete with other culture and power centres. Multinational enterprise offers a tremendous lever to this end. Its growing arsenal of foreign-based business operations is working for us around the clock. Its osmotic action transmits and transfuses not only American methods of business operation, banking and marketing techniques; but our legal systems and concepts, our political philosophies, our ways of communicating and ideas of mobility, and a measure of the humanities and arts peculiar to our civilisation.'

The study sees the Multinational Corporations as part of the state's political armoury which in times of crisis and war would be 'committed in conjunction with other elements of national and allied power . . . to weaken the enemy by denying it resources and disrupting its external commercial and industrial assets and operations.' (Global Reach)

Ford Worldwide

From its very beginning, Ford's success was built on mass production, mass production that needed a market that could not be confined to one country or even one continent.

The Ford Motor Company is the third largest company in the world. It employs almost half a million people and at least two million more depend on Ford for their jobs. With assets of over $18billion, the Ford Motor Company is as wealthy and powerful as many dozens of smaller nation states – but its ruler Henry Ford is accountable to no electorate, least of all to those whose livelihoods are affected by his decisions.

Second largest motor firm in the world – only General Motors is bigger – for the past thirteen years Ford has been 'the number one US-based auto firm outside North America'. It sells more cars in Europe than any other manufacturer – including the European car companies.

In 1976, Ford sold 5.4million vehicles worth $28.8billion or nearly £17billion. In 1977 it looks set to pass its record of 6 million vehicles in one year. (Driven nose to bumper, these would circle the equator one and a half times!)

Every year Ford's investment decisions allocate millions of dollars, and the very size of these investments send prime ministers and presidents rushing to curry Ford's favour. In 1976, $551million was spent on modernisation and expansion.

Every year Ford employees produce millions of dollars of profits for Ford's shareholders. In 1976 profits after tax were $983million, or an average $2,214 from each worker. $263.4million was handed out to shareholders. Results for 1977 will be even higher. Between 1948 and 1976, no less than $5,208.1million (roughly £2,900million) has been given out to shareholders by the Ford Motor Company.

Overseas

Ford sells and builds cars, trucks and tractors all over the world. It also makes missiles and satellites: is in the top thirty companies supplying the US armed forces is involved in property development, finance, and insurance. But the name Ford means cars. And Ford means cars all over the world, cars manufactured assembled or sold in over 100 countries.

Outside the United States, the most important car manufacturing and assembly centres are in Germany, Britain, Canada, Brazil, Australia, Mexico, Argentina, South Africa and Spain. While North America accounts for some 70% of Ford cars and trucks sold, no less than 41% of the Company's profits in 1976 were generated outside North America.

In times of recession in the US, these profits from outside the US become even more important. In 1975, when US auto sales were hit by the worst recession for forty years, profits from Ford's overseas operations accounted for no less than 71% of the total. Perhaps even more significant, Ford's international operations (i.e. outside North America) have been the major area of growth over at least the past decade. The lower saturation of the car market outside North America, and the larger populace, together with the Ford vision of gradual world-wide development and rising living standards, mean that the company sees its international operations as potentially even more important to profits. Certainly, the rate of increase in the number of vehicles of all makes sold outside North America has been almost double that within it in recent years, and today more than half the vehicles sold in the world are outside the United States.

Control Decisions

The Ford approach to the world was summed up by Henry Ford II speaking in 1967: "At the moment, we are paying our attention to the big markets where our penetration is large. That's where we say we can afford the top talent. I say that we need the top talent in the small markets. That's the only way to make them big."

But despite the spread of the Ford Motor Company, it remains very much an American company. Control of the vast empire is firmly held in World Headquarters, Dearborn, Michigan. **Nothing essential is ever done in the whole corporation unless it has been approved by Henry Ford II.** 'As a multinational company established on the five continents, employing a total of 450,000 people, Ford necessarily has rigid structures. Tasks, functions and responsibilities are clearly defined. . . . Obviously the final decision can be taken only by top management, but countless other ranks are involved in the preliminary skirmishes which lead up to the final decision'. (Seidler p.22) Top management of Ford is the American board – and in particular one man, Henry Ford II. Any decisions on investment involving more than $25m (about £14m) must be referred to the main board in Detroit – headed by him.

Speed up

From its very beginning, the success of the Ford Motor Company was built on mass production, mass production that needed a market that could not be confined to one country or even one continent. No less today, mass production, the economies of scale, and internationalisation of production and markets are the keys to Ford's route to power.

The Model T was the first and only world car – a concept that Ford is trying extremely hard to recreate today. In 1911 it was being built in Manchester, England, becoming England's best selling car the next year. In 1913 assembly began in France, and in 1916 the first South American car assembly plant was built in Argentina. New assembly plants started in 1916 in Denmark, 1920 in Spain, Brazil and Uruguay, 1922 in Italy and Belgium, 1924 in Sweden and Chile and 1925 in Japan. Through Ford of Canada the Model T penetrated the British Empire with assembly in Australia, New Zealand and South Africa. By 1924 Ford had built and sold ten million cars.

Already, many of the factors that characterise Ford today were apparent in the production of the Model T: mass international production; assembly line techniques with work organised so that each operation was subdivided into its simplest, fastest components, and the worker became just an adjunct to the machine; and a daily struggle for control on the shop floor. **When profits fell, as in 1925, Ford had only one response: make the car cheaper – which for the embattled workforce meant speed-up. The infernal**

working conditions, and the bloody battles over unionisation are part of Ford history.

But the logic of falling profit margins leading to constant attempts to impose speed-up on the workforce remains. Assembly line technology has not radically altered since its introduction and refinement in the 1920s, which limits the increases in productivity to be gained by the installation of new machinery. Management problems within assembly plants are notorious, and become overwhelming if the workforces in such plants become too large. An empirical limit to the size of car assembly plants of around 250,000 vehicles a year has been set by Ford. So when profit margins fall, as they have done steadily since the 1950s, Ford has one response – push up the productivity of the workforce by making it work harder. Speed-up, cuts in manning levels, increased flexibility of workers, fewer workers producing more vehicles: these are facts of life for Ford workers. **The process is assisted by Ford's capability to play one group of workers off against another, threatening workers in country after country with no new investment, or the ultimate Ford threat – withdrawal.**

Economies of scale

Today Ford organises its production across the five continents – achieving enormous economies of scale thanks to the sheer volume of its production. It also achieves considerable independence from, and control over, local economic and social conditions. Workers in any one of Ford's hundreds of factories are daily subject to management decisions that appear arbitrary and unjustified. What is not apparent is that these decisions are part of global strategies, involving workers in many other countries. Their effects are known only to Ford's centralised management.

"Just over a year ago we compared the costs of producing a Cortina with those of a close competitor in terms of design, but which was, only being produced at a third of the Cortina's volume . . . The difference in cost, attributable to economies of scale only was £170 per car." (Terry Beckett, Chairman Ford UK. 4.5.77)

Profit margins in the motor industry are everything – and to increase the profit on each car sold, the lowering of unit costs by making more of each component and each car is crucial. In 1971, before the oil crisis, Ford was complaining that its profit margin, at 4.1% of sales compared unfavourably with an average 5.7% for the thirty companies in the Dow-Jones industrial index, and 4.7% for the nation's 500 largest industrial firms.

Profit margins have fallen steadily: from 8.5% in 1950; 8.1% in 1955; 6.7% in 1960, 5.1% in 1966, to 4% in 1973. Realistic accounts for Ford before the war just do not exist, but certainly the General Motors profit per vehicle in the record year of 1973 was lower in real terms (adjusted for inflation) than it had been in 1928. In the battle to increase these margins, economies of scale are central to profitability.

It has been estimated that in order to be profitable at competitive prices, a new small car in Europe has to be on a scale of at least 500,000 cars a year. The Volkswagen Golf sold 420,000 in 1975, with a 500,000 a year target for following years; the Fiat 127 (on which Ford's Fiesta is largely based) sold 490,000 units that year, and the Renault 5 350,000. The Fiesta has now been launched with a target output of over 500,000 a year from 1977 onwards. This is despite the fact that there is already considerable over-capacity in the European small car market – estimated at some 30%. (*Capital and Class* 2.)

Capacity

The level of international integration of production on the Fiesta is unprecedented, and production on this scale means that component factories are running at optimum levels. This allows massive automation, for component factories are easier to automate than assembly plants. The two Bordeaux plants that produce all the gear boxes, transmissions and axles are highly automated, and on Ford's own accounting, are their most productive European factories. They produce one million gear boxes a year.

Assembly plants are more labour intensive – and management's problems limit their size. The Fiesta is being assembled in three centres, Dagenham, Valencia (Spain) and Saarlouis, (Germany), producing 100,000, 250,000 and 150,000 cars a year respectively.

As a comparison, consider British Leyland's production record. In 1976, Leyland produced less than 700,000 cars over its entire range – including *three* high volume low cost cars, the Mini, the Allegro, and the Marina.

Or take the larger cars – Ford has the capacity to produce 300,000 Granadas a year at Cologne, while Leyland's total capacity for Rover and Jaguar combined is only 190,000 units a year.

The gains to Ford in terms of cutting costs are clearly enormous – and Ford's policy of selling cars at whatever price the market will bear transfers these gains straight into profits.

Pricing

The Fiestas sold in Finland and in Belgium are both assembled in Dagenham from parts from all over Europe – but the Finnish one costs two and a half times as much. 'Not all the difference can be accounted for by tax and trim.' (*Economist* 12.2.77) Small wonder Ford executives dream of 'a world car in a world market'. 'The day is not far off when auto manufacturers will be producing the same line of products for sales everywhere in the world, with only the most minor variations among countries.' (Executive Vice President W. Bourke)

Terry Beckett, managing director of Ford UK 'sees it as a conscious return to the philosophy of Ford's original £100 Popular of 1935, or even to the famous Model T: that is building up volume through low price . . . Ford is in a good position to strike hard bargains with suppliers and to reap the benefits of large scale production'. (*Financial Times* 1.7.75)

Not only does Ford of Europe produce on a scale that can be matched by few, if any of its European competitors, it also has all the advantages of being part of the world-wide Ford organisation. For example a large part of the Research and Development costs are borne by Detroit. At the same time Ford in Europe can run its plants at optimum capacity – with a larger in-company market for its components than any of the Europeans. Of the first million gearboxes produced in Bordeaux, 640,000 went to the US – cheaper gearboxes for Ford all round. There is too, a degree of world-wide integration from which Ford of Europe benefits. Cortina bodies from the Philippines, engines from Brazil, and kits exported all over the world, all contribute to Ford's ability to operate at the optimum level, cutting costs and raising profits.

Control

'Henry Ford II wants to control everything that has his name on it' (Booton Herndon). And a lot more besides. Profits mean power, and power protects and maintains profits. The Ford Motor Company will not tolerate constraints on its behaviour, and its multinational operation, and sheer economic muscle give it a great degree of independence of and control over conditions in any one country.

Generalissimo Franco, fascist dictator of Spain at the time of the Valencia negotiations

Popperfoto

There are bound to be conflicts of interest between the company and the countries in which it operates – one small example is the way Ford gave its UK workforce a wage deal significantly outside the government's pay limits in late 1977, while the government, fearful of putting the new Bridgend investment at risk, did and said nothing. In most cases which lead to confrontation, Ford will pull out rather than accommodate.

As early as 1919 Ford engaged in a well publicised show-down with the fathers of the city of Cork. Ford had negotiated extremely favourable terms for a lease on property owned by the city, and part of the deal was a promise to employ 2000 workers. In the event only 1600 were taken on, and the city fathers threatened publicly to cancel the lease unless 400 more workers were employed. Henry Ford immediately announced that he would close the factory unless the threat was withdrawn, stopped work there and laid off 500 workers. He had no more trouble from Cork . . .

Immediately after the second world war, Ford of Italy was reduced to a distribution operation 'since governmental restrictions made it impossible to compete with Fiat in manufacturing'. In Britain at the time, Ford itself was receiving just such favourable treatment. 'The British government in the postwar years desperately needed exports in order to get outside money, and enabled the Ford plants to obtain equipment and raw materials.' (Herndon)

Even more desperate about its foreign exchange position was the Indian government, which vainly tried to insist that Ford manufacture within the country as well as assemble imported kits. 'In 1945 the company placed the Indian operation in voluntary liquidation, which is corporationese for saying the hell with it.' (ibid)

Similarly, in Spain after World War II, when Franco tried to demand manufacture, as well as assembly, Ford abandoned the operation rather than bend. Twenty years later, the Spanish government passed a special statute altering many conditions of the laws on local-manufactured content and minimum export requirements for foreign investors, especially so that Ford would build its new plant at Valencia.

In early 1966 the Palestine Automobile Corporation Ltd., which had been distributing Fords for 30 years, and was selling some 25,000 vehicles a year, began negotiations for a local assembly plant. Assembly from kits made in the United States, Britain and Germany was already working well in Morocco, Pakistan, Turkey, Thailand and the Philippines.

The Arab League protested, and threatened to put Ford on its boycott list. At the time there were Ford dealerships in Lebanon, Syria, Jordan, Iraq, Yemen, Saudi Arabia and Egypt. Ford, as usual, refused to back down, and for once, so did his opponents. Henry Ford II admitted that the decision was 'influenced in part by the fact that the company still suffers from a resentment against the anti-semitism of the distant past. We want to overcome that.' (Herndon)

Nazism

Throughout the 1920s Henry Ford I had used his personal newspaper the *Dearborn Independent* to write violently anti-semitic signed articles. Fritz Kuhn, leader of the American Nazis was on the Ford payroll, and as late as 1938 Henry Ford I accepted the Nazi German Eagle (first class) from Hitler's government.

The decoration was in thanks for Ford's active help in Nazi Germany's prewar preparations. In 1938 it opened a truck assembly plant whose purpose, according to US Army Intelligence, was to produce troop transport vehicles for the Wehrmacht. Ironically, **after the war, Ford received almost a million dollars from the US government, as compensation for the damage done to their German factories by Allied bombing.**

By the end of 1966, Ford was on the Arab League boycott list, and has remained there ever since. Now it seems likely that the ban will either be dropped, or at least partially, if not wholly, circumvented, in the foreseeable future. After three years of negotiation, Ford and the Egyptian government have agreed on the construction of a $145million factory to produce 10,000 trucks and 50,000 diesel engines a year. The project will be 30% owned by Ford and 40% by the Egyptian government – unusual for Ford which likes to have total control. The plant at Amneye, Alexandria, will assemble kits from Langley in the UK. When local content reaches 40%, in some eight years time, local manufacture will begin in Egypt itself. For President Sadat of Egypt, this investment is vital. It marks the first success of his 'open-door' policy of trying to attract foreign investment from the West, and Sadat is clearly prepared to take on the rest of the Arab League and go ahead with it whether or not the Arab League agrees.

The Egyptian deal also sheds light on Ford's financial relations with its subsidiaries. The Egyptian Minister of Industry, Mr Issa Shaheen tried to insist that Ford's return on its investment be limited to 10% per year. **Three days before agreement was finally reached, he was dismissed from his post.** Ford will maintain 'its right to take profits accord-

Henry Ford II leaves Downing St after threatening to end UK investment 1971

Popperfoto

Keystone

Edsel Ford II, heir to the empire

ing to normal practice, while limiting its dividends to 20%' (*Financial Times* 27.10.77).

Some idea of the way Ford deals with national governments on equal terms is given by looking at the negotiations behind the decision to site Ford's new engine plant in South Wales. For six weeks, Henry Ford and his company were wooed by two Prime Ministers, and offered millions by three European governments in their efforts to win the plant.

In fact, the decision to site the factory in Wales had been as good as taken as early as July 17 – when the board of Ford Europe met and made this recommendation. From then till September 9th three governments were kept in the dark – and their financial offers crept up. The final amount of government money going to the £185million investment is in the region of £70million.

Besides Britain's well developed engineering infrastructure, its low wage levels, and the proximity to Ford's only European foundry at Dagenham, there were sound political reasons for placing the new factory in the UK. About one-third of Ford's sales in the UK are of vehicles imported from Continental plants, and although the *Fiesta* is assembled in Britain, over 50% of its parts come from overseas. Although Ford of Europe is planning to increase its output from 1.1million to 1.7million units in the early 1980s, it is unlikely that many more of these vehicles will be made in the UK. The company already imports large numbers of cars – to take advantage of British Leyland's weakness it will have to import even more. **These imports are a highly sensitive area, and for a company like Ford to maintain its political goodwill, some counter-investment is necessary. 'With the new South Wales engine plant, the biggest single investment in the UK motor industry since the 1960s, Henry Ford has demonstrated his intention to win the battle for acceptability in the most dramatic way possible.'** (*Financial Times* 10.9.77)

Own and Control

The desire for total control extends to the Ford Motor Company itself, and particularly to its subsidiaries. Henry Ford I set out quite ruthlessly to gain control of the company from the original shareholders who had put up all the original capital, and successfully forced them out. By 1907 he had a 51% interest, by 1919 it was totally owned by the Ford family. In 1950 the company bought out the controlling interests of the Ford affiliates in Italy, Egypt, Spain, Holland, Denmark, Sweden and Finland. In 1961, it bought up the outstanding shares of Ford UK – despite the fact that this caused a national outcry, about capital going abroad.

In America particularly, Ford controls its raw materials by producing them itself, whenever this is feasible. It makes a substantial amount of the iron and steel that the parent company requires, and has been expanding its steel capacity. The Steel Division maintains a fleet of five vessels on the Great Lakes, which transport some six million tons of iron ore, coal and limestone each year. The Glass Division produces almost all the glass Ford uses, and sells to outside markets. Ford even owned a rubber plantation in Brazil at one point, but when this was devastated by disease, sold it to the Brazilian government.

Transfer Policy

Like any other multinational company, Ford can choose where it wants its profits to show – and within wide margins how large they should look. The financial flows – the movement of money from one company account book to another – often bear no resemblance at all to the reality of cars and parts shipped around the globe and the making and selling of vehicles.

For example, Cortina bodies produced at the body stamping plant in the Philippines (together with engines produced in Taiwan) are exported to England. The company is managed by Ford Asia-Pacific Inc of Australia. But financially, money from the Philippines goes to Ensite

Philippines Ltd, which is wholly owned, by Ensite Ltd of Canada, itself wholly owned by the Ford Motor Company.

Ford companies selling to other Ford companies can, in fact, charge what suits their overall best interests, to show a profit where they wish. For example, Ford of Venezuela is claiming large losses as its reason for not complying with increases in the local-manufactured content laws the Venezuelan government is trying to impose. 'One official pointed out that both 'ends' of the system – foreign manufacturer and local retail dealer – can realise handsome profits while the local assembler takes a loss'. (*Financial Times* 2.11.76) No country has yet established fool-proof methods of countering such transfer pricing, and Ford, of all companies, would be the last to respond to pressure.

Funny Money

The pay claim submitted by Ford's hourly paid workers in the UK shows how, even when the money has finally come to rest in a given company's books, profit figures are immensely manipulable. Stated profits for 1976 were £121.6million before tax, £59.1million after tax. (In fact only £7million of tax was really paid – the rest was 'deferred', which means it will never be paid. Deferred tax is now financing more than a fifth of capital employed). But Ford went on from this to claim that current cost profits (allowing for the effects of inflation on the costs of replacing plant and machinery) were only £25.1million before tax, or £5.6million after tax. Not satisfied by these figures, the union negotiators called in a highly respected firm of stockbrokers to give an independent analysis of the accounts. They agreed that Ford's stated current cost profit of £25.1million was a gross underestimate, and put forward the figure of £46.6million as more realistic, £27.1million after tax. Even the *Financial Times* was prompted to ask 'So why does the CCA (current cost accounting) figure come to be so low? It hardly makes sense in the context of a £74million improvement in liquidity at a time of rising activity.' (*Financial Times* 26.3.77) The directors of the company, despite the claimed profits of only £5.6million after tax, decided that the amount available for distribution to shareholders was in fact £67.4million.

An important insight into the company's financial dealings came in 1961, when Henry Ford set about buying up the 45% outstanding interest in the UK company. It was a time of austerity in the United States, and there was a public outcry about the US gold shortage, and the wickedness of spending abroad. Henry Ford II was forced to admit that 'all expenditures abroad came out of earnings abroad, and that in the decade from 1951 to 1961 the company had repatriat almost $2billion of profits to the U (Herndon). By 1972, Ford's shareholdin in its European holdings were worth so $1billion. This represented almost entire the reinvested earnings of doing busine in Europe for some 60 years. 'In a go year, however, dividends from Euro bring perhaps $110million into the US (*Forbes* 1.7.72)

The new engine plant in South Wale for example, will be entirely finance from UK sources – there is *no* capit export by the Ford Motor Company only repatriation of profits.

Earnings for Year ended December 31st in millions of dollars

Year	*Net Sales*	*Operating Profit*	*Net Profit*	*Employee (worldwide*
1976	28,840	1,586.9	983.1	443,900
1975	24,001	436.4	322.7	416,100
1974	23,621	605.2	327.1	464,700
1973	23,015	1,553.8	906.5	474,300
1972	20,194	1,617.9	870.0	442,600
1971	16,433	1,267.4	656.7	433,100
1970	14,980	1,014.8	515.7	431,700
1969	14,756	1,110.0	546.5	436,400
1968	14,075	1,278.9	626.6	415,000
1967	10,516	149.8	84.1	394,323
1966	12,240	1,157.5	621.0	388,000
1965	11,537	1,282.5	703.0	364,500
1964	9,671	985.8	505.6	336,800
1963	8,742	1,028.2	488.5	316,600
1962	8,090	1,007.1	480.7	302,600
1961	6,709	818.4	409.6	262,100
1960	6,798	842.4	427.9	266,000
1959	6,649	933.1	451.4	251,500
1958	5,281	253.7	116.2	230,000
1957	6,839	632.8	294.0	277,300
1956	4,647	442.6	248.2	266,400
1955	5,594	929.2	454.2	269,100
1954	4,062	463.9	242.6	253,200
1953	4,211	478.9	179.1	253,600
1952	2,640	256.9	124.8	198,000
1951	2,742	346.6	136.4	
1950	3,029	512.6	259.6	
1949	2,249	287.2	171.8	
1948	1,972	160.8	103.8	
1947	1,502	95.1	68.8	
1946	894	d14.3	d1.2	

(Source: Moody's Industrial Manual 1977)

The value of sales per employee rose steadily from $13,332 in 1952 to almost $65,000 per worker in 1976. At the same time the number of vehicles produced per worker almost doubled – from 6.2 in 1952 to 12.2 per year in 1976. Net profit per worker has also risen, though more erratically, from $630 in 1952 to $2214 in 1976.

On The Line

Car production is the most extreme example of modern industrialisation. It is the birth place of automation and the birth place as well of the assembly line's inescapable byproducts: drudgery, stress, and the dehumanisation of work.

At the River Rouge plant near the Dearborn headquarters of the Ford Motor Company, the entire manufacturing process is carried on in one vast industrial complex. From the moment the ore, coal and limestone arrive at the plant, until a worker jumps into the finished Mustang, turns on the engine and speeds off the line, only 33 hours have passed. This complex alone, the largest self-contained facility in the world, consumes more than six million tons of iron ore, coal and limestone each year.

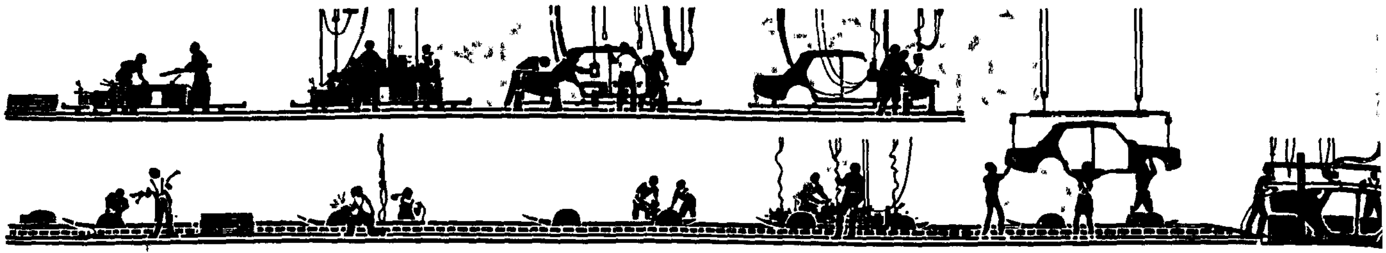
Every day it generates enough electricity to light a city of a million people, burns enough coal to heat the homes of 330,000, consumes enough gas for a city of 1½-million, and uses 425million gallons of water. It operates 20 diesel locomotives and some 860 rail wagons on more than 100 miles of railway track. Within the complex are 229 coke ovens, 3 blast furnaces, rolling mills, a gigantic foundry, an engine plant, a glass plant, an assembly plant . . .

The 35,000 employees are dwarfed by machinery and plant, but at every stage of production, singly or in groups, *they* do the work. They cast the engines in the foundry. They operate the presses as the steel is stamped into shape. They piece together the body, build up the engines, and finally assemble the car from thousands of bits.

Throughout the length and breadth of the complex, rollers, conveyor belts, chains and gatelines pull the component parts of the car relentlessly to completion.

In the Rouge plant, the final assembly line is 1200 feet long, travelling at 1700 feet an hour. Cars are put together, and vehicles roll off the end at a rate of 60 each hour.

The assembly line is noisy and chaotic, the air filled with the smell of oil and rubber, with automatic wrenches giving



off piercing screams. Bumpers, bonnets hanging on hooks like carcasses, rumble overhead and are fed onto the line. Computers match colours and styles with different body models. Tyres thud down chutes and are installed by workers with power wrenches that tighten all the wheel bolts simultaneously. Seats are carried to the line and then juggled into position. Finally, a worker jumps into the seat, turns on the engine, and with a scream of tyres the car sprints away from the line. At Rouge this process is repeated day and night, five days a week – 60 cars an hour, 440 cars a shift, 880 cars a day, 13,000 parts into each car.

A New Type of Worker

The work of the modern car assembly worker leaves nothing to him. Automatic machines show a transfer of thought, skill and intelligence from person to machine.

The pace of the line dictates the speed of work on and off the line, for everything in a car plant eventually finds it way onto the assembly line.

In any car plant the workforce is made up of machine tenders, assemblers, skilled workers, inspectors and testers, helpers and janitors. In recent years the proportion of tenders and assemblers has increased considerably. Physical strength, skill and experience are no longer so important. Skill has been transferred to complex machines and brute force to gigantic lifting and conveying gear. (In modern plants there will be maybe 200 different kinds of mechanical device for carrying and conveying materials.) Along with the development of automatic and handling machinery has come a levelling of wages. At the same time the total number of workers needed in a modern plant is reduced. For example in River Rouge in 1929 there were 102,800 workers. By 1970 there were less than 35,000.

Between 1957 and 1976, car and truck production by the big three US auto makers rose from 6.7million to 10.9-million — an increase of 62%. The work-force, however, rose by only 7.7% over the same period.

Car Production

Some operations are almost fully automatic, while others require considerable amounts of labour.

Panel production: This involves the stamping of body parts. The Press Shop typically has 15-20 lines, each producing some 20 parts per minute. The stamping operation is now largely automatic, employing about 10% of the labour force.

Body Assembly: Car bodies are constructed by welding various body panels and stampings into sub-assemblies that finally form a rigid body. Sub-assemblies are spot welded manually, final welds are often fully automatic. The process requires about 30% of the workforce.

Powertrain Production: The most costly sector of production, supplying engines, transmission and axles. Rough castings are heated, drop forged and machined; most of the machinery is very sophisticated. This sector accounts for about 25% of the workforce.

Painting: Here the welded bodies are cleaned, primed and painted. The workforce is small, less than 10%, but considerable skill is required in paint work.

Trim and Final Assembly: Thousands of parts and components are installed onto the painted body. This is a long and complex process involving separate sub-assemblies. Workers are located at stations. A trim line might have 70-80 stations, with specified parts stocked at each station. This sector is very labour intensive, accounting for about 25% or more of the workforce.

Automatic machinery has also altered management methods. By using machines whose operations and output are uniform, standardised and automatic, the labour effort has become rigidly defined and measurable. The workers' contribution is dictated simply by the speed of the line. This makes demands on nervous an mental activities, such as watchfulnes quick judgement, dexterity but perhap most important of all the nervous endurance to carry through dull, monotonous, fatiguing, rhythmic operation

But automation in the car factory is no complete. Despite technological advance and scientific management, the necessit for human labour in production has neve been and cannot be completely removed No more graphic illustration is needed than a picture of a car plant during a strike. Automatic tools hang limply on the end of air lines. Panels hang from overhead conveyors. A completed car slopes awkwardly half way down the ramp. Without human labour the machinery, the management, the product, the profit is nothing.

Life with the Lines

Everyday management of production depends on organising the men in such a way that more and more can be extracted from them. The contribution of the machine is fixed. Only the worker can work harder. Organised in different ways in combination with different machines his contribution can be increased – more work from him means more profits for Ford.

"Save ten steps a day for each of 12,000 employees" said Henry Ford of his system of bringing stocks to employees instead of having the worker move around freely, "and you will have saved 50 miles of *wasted* motion and *misspent* energy."

The organisation of labour and technology of a car plant are devoted to one end — the production of cars as profitably as possible. An essential element in this process is the progressive elimination of any control of the job by the worker, in so far as is possible, and the transfer to a device which is controlled by management from outside the direct process. The control does not stop at the machine. Scientific management also seeks to mould the man to the task even before he enters the car factory. James R. Bright of the Harvard Business School wrote of 'economic progress' and 'automation' in these terms:

'I suggest that excessive educational and skill specification is a serious mistake, a potential hazard to our economic and social system. We will hurt individuals, raise labour costs improperly, create disillusion and resentment and destroy valid job standards by setting standards that are not truly needed for a given task.' (Braverman, p.214)

It's a matter of chance which particular job a new starter at Ford finds he is given. If the company wants 20 operators, a couple of janitors and a dozen foundry workers, in that order, the job the new man gets will most probably be decided by his position in the queue the morning of the interview. As early as 1925 Henry I admitted that many of the new recruits only needed a days training. It's the same at Ford today. A morning in the 'Conference Room' (Dagenham) with a talk from Personnel about the 'big Ford family' and a conducted tour with the training officer, then new recruits are briefed by the Safety Officer. "The convenor was supposed to see us. He didn't turn up. So the training officer introduced us to the union saying much the same thing as he'd said before and that Ford liked everyone to join the union, because in Ford all the problems are solved by talking and procedure." (Ford worker)

After the morning session they go straight onto the line "You know the sort of thing. This is Fred, he'll show you what to do. 'Hello' says Fred. 'You stick this in here and that in there – I'm not paid for this you know.' You either do it or you don't. If you don't you're unsuitable and you get your cards." (Ford worker, *New Society* 12.6.75).

Stench

The atmosphere in the car plant is remarked on by all Ford workers you meet. "Walk through the main doorway of the plant on any day of the week and the atmosphere seems to knock you off your feet. Fumes from the Heat Treat. Fumes from the Foundry. The stench of burnt oil. The air seems full of swarf. Oil everywhere. Your clothes are blackened just by standing in the atmosphere for an hour or two. The machines are filthy with a mixture of metal dust, oil and dirt." (Ford worker)

On the lines the work isn't hard . . . It's the never-ending pace, the monotony, the debilitating tedium.

"The job gets so sickening, day in day out, plugging in ignition wires. I get through with one motor, turn around and there's another staring me in the face. It's sickening. The assembly line is no place to work I can tell you. There's nothing more discouraging than having a barrel beside you with ten thousand bolts in it and using them all up. Then you get a barrel with another ten thousand bolts and you know every one of those bolts has to be picked up and put in exactly the same place as the last ten thousand bolts." (Walker and Guest)

Phil Stallings is a spot welder at the Ford Assembly plant on the south side of Chicago. He's 27, and works on the third shift, 3.30pm – midnight. His job consists of the first welds on the car body. The welding guns hang from the roof.

"I stand on one spot all night. The only time a person stops is when the line stops. We do about 32 jobs per car, per unit. 48 units an hour, 8 hours a day. 32 times 48 times 8. Figure it out. That's how many times I push the button. The noise is tremendous. You open your mouth and you're liable to get a mouthful of sparks. That's a burn, these are burns . . . It don't stop. It just goes and goes and goes. I bet there's men who have lived and died out there, never seen the end of that line . . .

"I don't like the pressure, the intimidation. How would you like to go up to someone and say 'I would like to go to the bathroom?' If the foreman doesn't like you he'll make you hold it. Just ignore you. (Turkel p.220 ff)

"You can work next to a guy for months without even knowing his name. One thing you're too busy to talk – the other you can't hear. You have to holler. They got these little guys coming around in white shirts and if they see you running your mouth they say 'This guy needs more work'.

"Everyone has a station. You're supposed to get your work completed within a certain area, usually around ten maybe fifteen feet. If you get behind, you're bumping into the next worker." (Ford worker, Chicago)

It is not simply the automation, the monotony and unpleasant conditions that determine the daily routine of the worker at Ford. **The competitive drive of the company and the slow decline in auto manufacturing profit margins leads Ford management to push for ever greater productivity levels and even faster line speeds.**

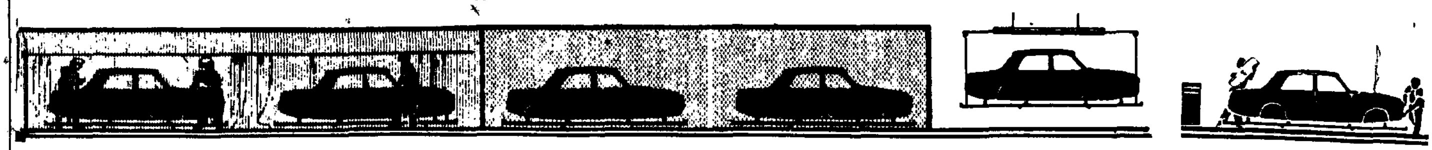
'You will know that the new Cortina is one of the best selling cars that we have ever built . . . In order to improve the supply situation we have advised your shop stewards of our intention to run the Cortina line at 55 jobs per hour instead of the present 45 jph.'

This ultimatum was given to Ford workers at Dagenham in January 1977. The same number of men would be confronted with an extra ten jobs per hour, an increase of 22%. The line worker would be expected to do almost a quarter as much again. The 'supervisors' brief' to employees anticipated questions and gave the answers. The final question 'What's in it for me?', was answered: 'There is no tangible benefit to you or me, but we all have an interest in ensuring that the company is efficient and profitable for that is what secures jobs'.

Pressure

A month later workers at the engine plant at Dagenham were told that management were going to speed up from 120 to 133 engines per hour, one engine every 27 seconds.

Engine workers felt that they were beginning to operate like machines themselves: they were getting less and less space to work in, and less freedom of manoeuvre. This was especially true of workers on freehand operations who felt that the timings established by the Company were impossibly rigid. The intensity of production meant that every day workers



were being warned, or suspended for not working hard enough, or for not maintaining quality. It also meant a high level of absenteeism and labour turnover in certain sections.

At Langley workers still talk about the Transit assembly line. Demand was so high that management ran the lines as fast as they could get away with it. "We had to do 20 jobs an hour. We literally chased trucks down the line, one every three minutes." Many couldn't stick it and left. Turnover was a big problem. Transit assembly was eventually transferred to Southampton. "It was a mad line and we were glad to see the back of it." (Langley steward) Southampton was expanded to take it and an all green labourforce recruited to assemble it. For management at Ford this was the most effetive way of overcoming the resistance of an experienced workforce to such speed up.

Work Study

The day to day methods of speed up are less crude but equally effective. Known as 'human' or 'industrial' engineering, it involves the management and organisation of the individual worker. It invariably entails speed up or reduction in manning levels.

Ford has its own method of 'human engineering' which has changed little since the early days of Henry Ford I. Its aim is simple. To tie the individual operator as tightly and efficiently as possible into the pace and motion of the machine.

'Work measurement is the application of techniques designed to establish the TIME to carry out a specified job' (Ford Work Standards Training Course p4). 'Time Study' is the most widely used of all work measurement and 'involves direct observation of work whilst it is being performed, timing it with a suitable stop watch, and **the application of a rating technique**' (p5).

One job is broken down into nine elements, each element divided up by break points. Each of these elements is timed and retimed. Any 'human' deviation is also timed, but eliminated from the final time, – 'circled out'. In the example we have, the operator talks to another employee, and this is circled out.

But the deviations may be less innocuous. The worker's movements may not be tight enough, certain actions may be superfluous. The manual reminds the trainee industrial engineer: 'If the operator persists in using excessive motions during the observations, the study will be stopped for the foreman to reinstruct the operator in the prescribed method.' (p9)

The Rating Factor

The impression given throughout the training programme is that every stage is scientifically determined. But an operator's speed can vary and be varied. 'The most detailed description and observations are of little value' the manual adds, 'if the performance of the operator is not properly evaluated' (p9). At this point the Industrial Engineer has to alter all the timings if, for example, he thinks the operator is not working fast enough. This is known as the 'rating factor' and is entirely at the discretion of management although it appears to be arrived at 'scientifically'.

'Each operating area is responsible for carrying out periodic rating sessions in order to ensure that Industrial Engineers are able to rate operator performance competently.' (p11)

Squeeze

The times that are established in this way are then enforced. In the inhuman language of the manual, this is the 'all day pace'. (p17)

For management money is success, and the difference between success and failure often lies in the extra car or two that they can squeeze out of the men. Every minute of the day throughout the Ford empire management is trying to reduce manning levels and speed up operations.

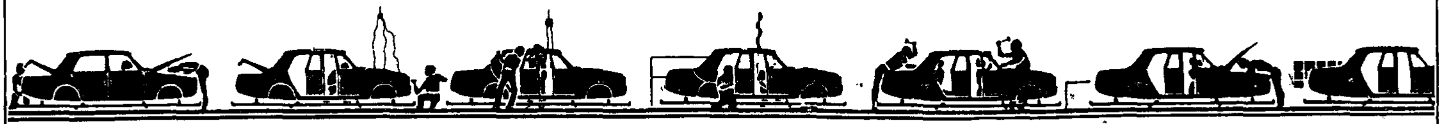
"This guy comes out and he's got a little clip board and he's got four stop watches on it, and he's standing there watching me work. Everything I do he puts down. They time me for a day . . . He said now look, don't walk around this way from left to right, why don't you try walking from right to left. I had nuts and bolts over on the table and I was supposed to walk over to it, pick them up and walk back. And he says don't do that. So he bought me a little pouch to put around me. Now I'm supposed to put the bolts in the pouch. All I've got to do is reach in the pouch pick out the bolts and screw them on." (Wilbur Haddock, black worker in Ford Mahwah, New Jersey)

Tension

Through the day tension increases on the line. There is an almost audible sigh of relief as a gap appears on the line. The rest lasts as long as a job would normally take, thirty, maybe fifty seconds. On these occasions when the steady movement of the line slows down, the hope is felt by many and expressed by some that the line might be stopping. "You get the feeling, everybody gets the feeling and everybody is wishing – whenever the line jerks: 'breakdown baby'." All carworkers say that when the line does stop a great cheer goes up, echoing down the line; the pressure, just for a moment or maybe half an hour, is off.

One worker told of a line on which he was working, which not only stopped, but then began to go backwards. The utter absurdity, and an awareness of the consequences if it continued caused hysterical amusement among the men. "The faces of all the men around me were wreathed in smiles. The line which had everyone in its grip had not only forgotten to be itself but was even contradicting its own logic." (Chinoy, p.64)

The light moments are few and far between. Ford workers recount them with relish. The button boxes which hang down from the roof which the workers can use to stop the line in an emergency are buckled and chipped. Pressing the button tells management which worker or station was responsible for the stoppage. Someone at Dagenham discovered that swinging them hard



against the wall had the same effect without the button being depressed and giving away who stopped the line. For a moment, not more, the men on the line can stand back bemused as men in white coats rush around getting the line started.

What proportion of the stoppages, sabotage and insubordination at Ford are desperate moves by desperate men to overcome the sheer monotony or stress of it all, can never be assessed. But repetitive assembly work alone places a heavy burden on those who do it. Research carried out in 1973 by Ford's Medical Officer, Dr Allardice, in the company's plants, provided substantial evidence that this kind of work exposes workers to exceptionally high levels of stress. The report was never published. Ford suppressed it.

Turnover of labour in a car factory is also extremely high.

On a normal day at Ford in Britain, more than 3,000 workers will be off sick. Another 3,000 will just not bother to turn up. So constant is sickness and absenteeism that Ford have two ways of counting its workforce. Those on the pay roll and those actually there. There is a permanent 'reserve pool' on Ford's payroll partly to compensate for the heavy toll taken by the work of making cars.

Pressure and strain are structured into the very heart of the assembly plant.

The Cost

The inexorable pace of the line takes a *heavy toll* in the lives and health of the workforce. Ford production methods are among the most ruthless in the world. Continuous shifts, constant speed up and increasing work loads reduce the shop floor to a kind of battleground between profit and the capacities and needs of the workforce. Ford evaluations of the profitability of its production in no way take into account the human and social costs that are its inevitable consequences.

Every day in the US 65 carworkers drop dead at their jobs on the factory floor. On average some 16,000 of them die in the plants every year, of whom over half have had heart attacks. The reality is even worse. These figures do not include the results of accidents at work on these lines. Added to which are the 63,000 workers with disabling diseases, the 1,700,000 with lost or impaired hearing. The car industry reaps as heavy a toll upon the American working class as did the Vietnam war. (*New Society* 12.6.75)

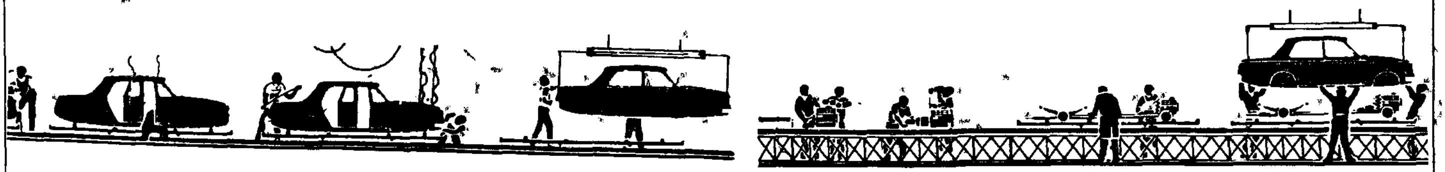
Death

In May 1972, a worker at a Ford engine plant in Ohio fell to his death through the Foundry roof. He was the fourth worker killed at that plant during the first half of 1972. The US Occupation, Safety and Health Administration ruled that the company was at fault in three of the four deaths. Ford was fined $200 for the fourth worker's death. (*Wall Street Journal* 1.11.72)

'At approximately 4.15am on the night shift on the night of September 11 to 12, 1964, Tommy Turner collapsed on the line which assembles Cortinas. One of his mates noticed this, quickly stopped the line and attempted to help the sick man. He was sent back to his job by the supervisor who then dragged Tommy to the side of the line, placed another operator on the fallen man's task and restarted the line. Only then was a message sent to the Medical Department who later arrived with a stretcher. Owing to pallets stacked high at each side of the line it was found impossible to reach him, so a 'stac-a-truc' was sent for. It was some 13 minutes before the sick man reached the Medical Department, by which time he was dead.

'Many weeks later the PTA shop stewards committee was informed by management

Ford Workers' Group Dagenham



that "Turner would have died in any case, he had a medical condition".' (*Solidarity*) If this was true, why was this man working at one of the most strenuous jobs in the plant?

Lives in Danger

'On Thursday night shift, January 27th, 1977, there was a fire in the Hot Test in the Engine Plant. Someone saw a glow under the Hot Test, and tried to raise a warning. The fire alarm was pulled, but this is connected to the Security Department, and only rings when they turn it on – 2 minutes later! Meantime there was a great roar, and the metal ventilator shaft from the HT turned red-hot, then white-hot. Everyone ran like hell. But the white-hot shaft was right next to the exit, so they had to run past it to get out. It was also right next to the fuel tanks for the Hot Test! Luckily nobody was hurt this time. But Ford, true to form, wanted to restart half the Hot Test at once! (as well as blaming workers for the accident). The HT workers refused, until the place had been given a thorough check-out . . .'

Another Fire

'The Hot Test in the Engine Plant continues to be a scandal, since the last fire we reported. Shortly after the fire on January 27th, the Safety Alarm started going off. Each time the workers stopped work . . . but each time (*five times!*) they were talked into returning to work. On the final occasion, somehow, miraculously, the Alarm didn't go off all through the following night shift. The reason for this was because a foreman had switched the alarm off completely.

'The following shift, the Hot Test workers refused to start work till a proper repair had been done. They threatened to call in the Factory Inspector and the repair was done.

'But following this there has been an explosion on the new Hot Test on the Fiesta line. A worker was hurt and had to be taken away by ambulance. And now, just last week, there has been yet another fire in the Hot Test.' (Ford Workers' Group Dagenham 1977)

'Ford Motor Co said an explosion yesterday at its Michigan Casting Centre near Detroit injured 12 workers, none seriously, and forced the company to send home all casting production workers for the day.

The United Auto Workers' union called the explosion "the latest in a series of shocking examples of how little attention Ford has paid to protecting the well-being of the workers."

During the recent contract negotiations, the UAW charged that 75 workers have been burned this year at the new $200 million facility 'due to flames leaping from furnaces.' (*Wall Street Journal* 30.10.73)

Health and Safety

'The Body Plant (Dagenham), with a workforce of 7,000 staff and hourly paid, has 80 to 140 eye injuries reported to Medical each month.' (*Ford News* 12.11.76)

The main health problems in Ford's car plants are apparent even to the outsider. Noise is by far the most obvious. So many jobs involve metal to metal contact. Deafness is an 'occupational hazard'. Ear muffs are provided, and the Company ducks any further responsibility for its effects. Many workers tell of not being able to speak or even shout above the constant racket. The Press shop seems to be the worst. When the (Bliss) presses are at work at Dagenham, the noise is like standing up close to a lot of church bells in full peal. A Company-conducted test of noise levels registered 112 decibels.

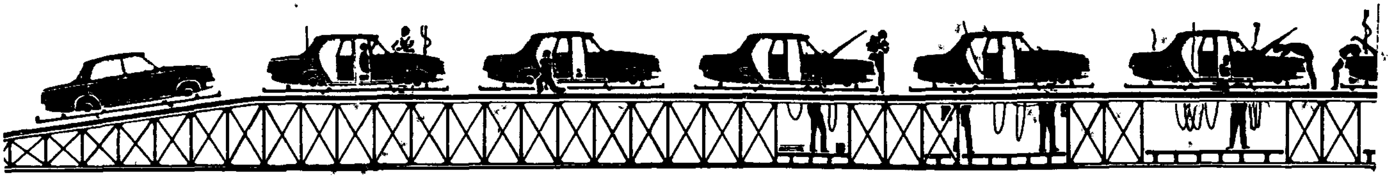
Another danger is immediately visible – oil. Oil mist is said to be much better than it used to be. There was a time when you couldn't see 25 yards across the machine shop at Dagenham. But the fitters and toolsetters are still in some considerable danger. It is still said that 'you could sink an oil well at Ford'. In fact there is so much waste that Ford finds it profitable to collect it and recycle it. The danger from oil is that it produces cancer, particularly cancer of the skin. Ironically, used oils are even more dangerous.

Paints and solvents pervade the engine plant and paint, trim and assembly plant. The workers there claim you get used to it, but the fumes are a serious hazard. The fumes from paint spraying penetrate beyond the booths. Workers inside the booths often wear nothing more than cloth face masks, totally inadequate to stop the dangerous inhalation of fumes. Very little is known about the constituent elements of paints and solvents. Those that are measured are measured separately. Nothing is done to measure the effects of all the chemicals combined.

With many of these chemicals, treatment is limited to dispersing the fumes into the general environment. One of the degreasers used at Ford (*Tetrachloroethane*) illustrates the problem. The Government's technical data notes that smoking should not be allowed in the vicinity of the chemical due to the danger of its reacting with the lighted cigarette and producing deadly, phosgene gas. Ford's own medical department were not consulted about its introduction. It was only workers' complaints about a considerable and unpleasant smell that alerted the Safety Department to the danger.

Coke oven emissions are very dangerous for the 300 or so who work nearby. Apart from the heavy smoke, there are the by-products ammonia, tar and benzene. Anyone working here has a four to five times greater chance of contracting cancer than a heavy smoker.

Ford have no noise reduction engineer. For the 60,000 workforce in the UK they have 6 medical people and one industrial hygienist and an assistant (1975). They seem to be unable and unwilling to estimate the cost to the workforce in health and lives of producing cars in the present environment. Ford's reluctance to take steps to improve the safety of their cars, or to remedy specific faults even in the face of pressure from consumer groups and governments, is a depressing omen for Ford's workforce. To date no-one has any idea of the toll in workers' lives lost and impaired through producing cars in Ford factories around the world.

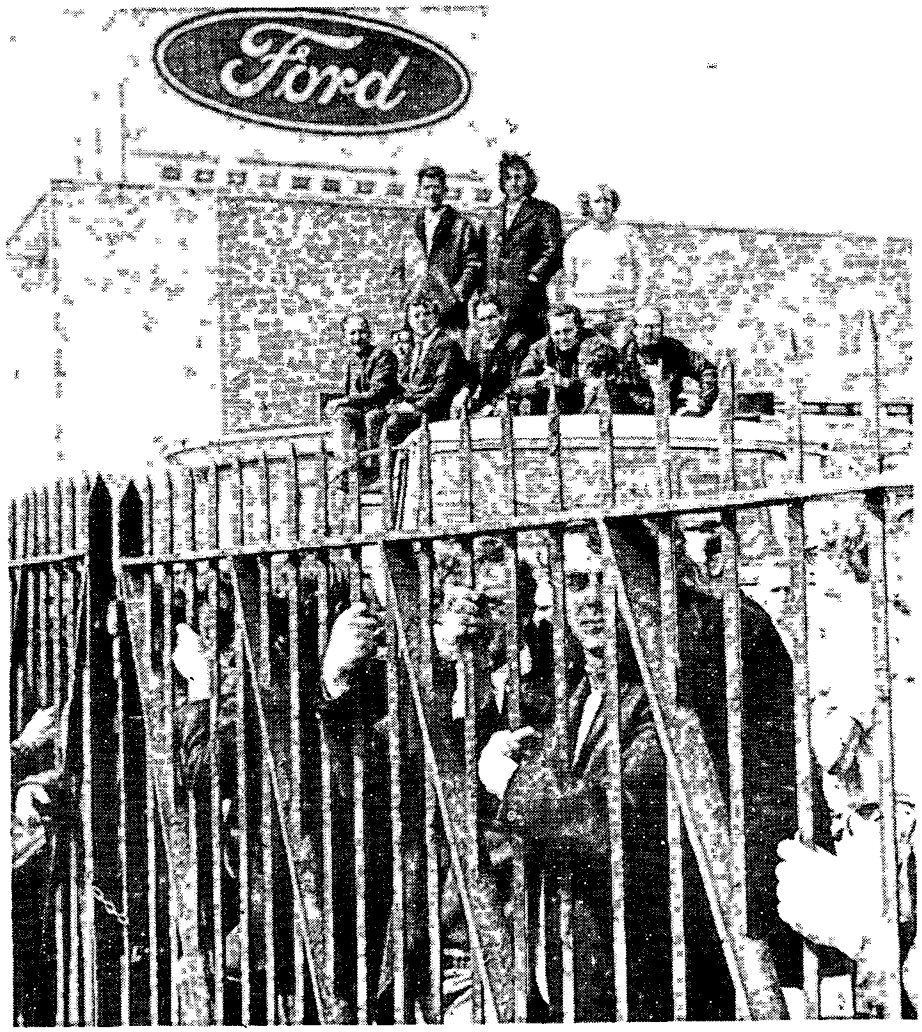


Shiftwork

'The scheduling of hours of work is undoubtedly one of the major social problems of industrial society. As technology advances, the natural rhythm of human life and the pace of industrial production move progressively further apart and become increasingly out of step with one another.' (Maurice)

All car manufacturers make their workers work shifts around the clock, to keep the machinery moving and maximise its profitability. But the human and social costs of working shifts are enormous.

"If John is working on nights, he'll just want to get up on Saturday afternoon and turn the box on. Ford has mucked up our whole weekend. There is just about time to do some of the shopping. I get all irritable because I haven't seen him all week. Things get really tense when he's on nights. You've got to get used to living on your own. It gets really hard on the kids. You have to tell them to shut up all the time because Dad is trying to get some sleep. You get tense all the time, because you think they are going to wake him up. Some blokes find it really tough to sleep during the day. You can't blame them when they get all ratty, but it's tough on the kids." (Is there a life after Fords. *Big Flame Dagenham Bulletin*)



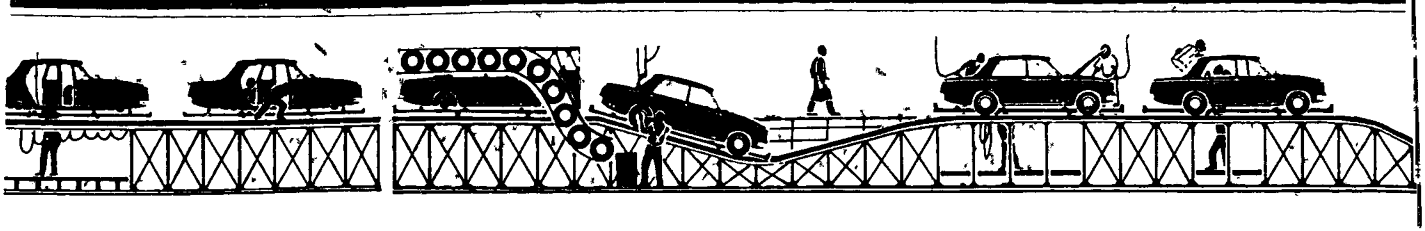
Ford workers at Swansea occupy their factory

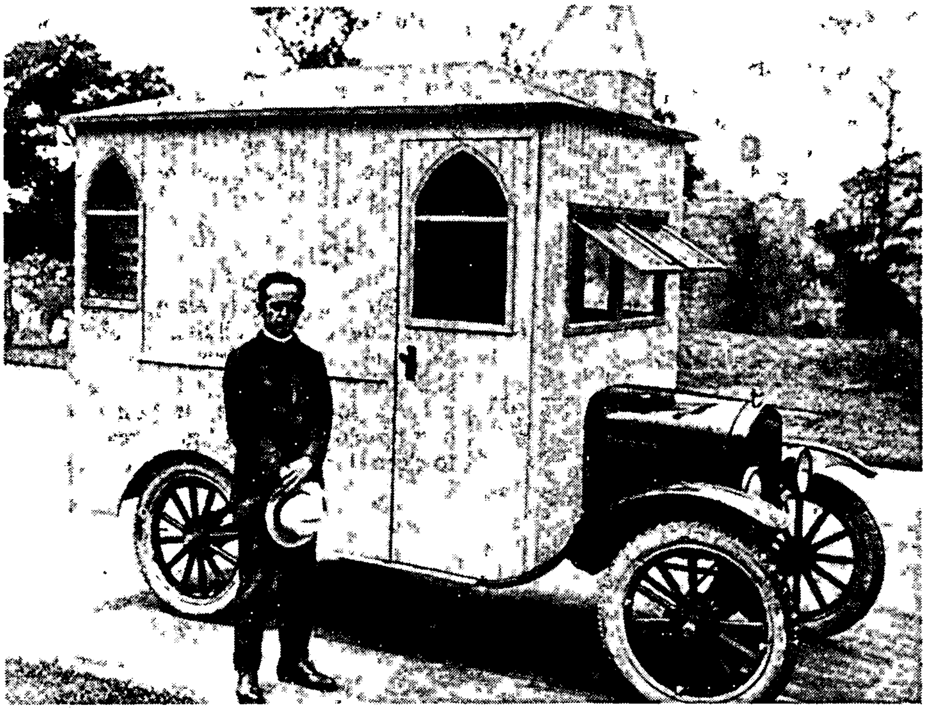
"You walk into the plant and the first thing that hits you after the racial composition of the workers are the displays of Playboy type nudes in every available space. Like being wrapped up in *The Sun*. The naked woman becomes the symbol, however distorted and distorting of 'real' life outside the factory. And any woman who happens to pass through is seen in this 'extremist' way. What a life. K. got married at twenty during the holidays, came back a couple of days late. Looking rosy. But two nights later he was thinking of leaving. Used to get home after his life had left for work, getting up in the usual stupor as she came home; saw each other for two hours and then he was off to work. Another guy who used to go on about fucking, how big some woman's breasts were, was in fact so wiped out he hardly ever made love with his wife. Pretty common. As common as the other. That after a night or day of tension being built into you by the line all you want to do is get out of there and fuck, and come as soon as you can. With assembly lines running in your head, it's no fun." (Interview Big Flame, Dagenham)

Workplace Struggles

On the approach road to Ford's River Rouge plant in Detroit, a worker has written: 'WE COME HERE FOR EIGHT HOURS A DAY, DO WE HAVE TO WORK AS WELL!'

The shop floor of a car assembly plant is a battle ground. To the visitor maybe, the impression is of automated order. But on the shop floor, among the machines, the battle is constant, as constant as the line itself and the drive by management to produce profits. To the men on and off the line the complexity of car production has no immediate relevance. There are two preoccupations, the need for money and the desire to survive. The Beatles hit of the sixties 'Money don't get you everything it's true . . . but what it don't buy I can't use', was written by a Ford worker in Detroit, whiling away





Travelling chapel built on Model T chassis

the hours at work. Just as important is the battle to survive inside the plant, to impose some kind of control on the job and the authority of management.

Ford workers can do little about money on the shop floor. The rate for the job is agreed nationally between Ford and the unions. There are no incentives, no productivity deals negotiated inside the plant, no piece work. Confrontation on the shop floor invariably involves questions of control; control of speed of work, of job content, and manning. Figures for industrial disputes at Ford bear this out.

Industrial Disputes at Ford 1975
(Britain)

Grievance	*Hours lost (%)*	*Vehicles lost (%)*
Pay	4.8	9.9
Work content	68.4	61.7
Labour Flexibility	0.6	0.8
Movement between grades	–	–
Demarcation	0.4	0.3
Working environment	1.4	7.9
Hours of work	1.1	0.3
Overtime	1.0	1.4
Discipline	10.4	12.7
Trade Union matters	2.1	2.6
	–	0.1
Miscellaneous	9.8	2.3
Total (number)	1,845,750 (100%)	37,396 (100%)

(Ford Motor Company)

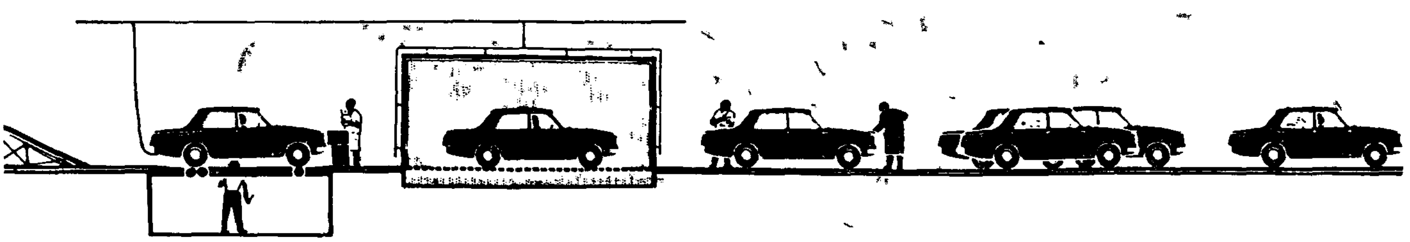
A whole network of organisations and defence routines has been built. This protects the workforce from the excesses of management, while at the same time it provides a base from which the workers themselves assert and claim certain benefits.

That's the overview. On the shop floor things are different. More often than not production flows smoothly. Suddenly, out of nowhere a mad scramble occurs as a manager or a foreman infringes some written or unwritten rule. Men will just down tools and go home if provoked. Or remain in position refusing to budge, confronting management, refusing to work. If contacts are good on the line, defensive action by one will be supported by others.

For management any stoppage, no matter how small, is a crisis, though there are cases where management themselves provoke a stoppage to get themselves out of a fix. **Crucial work is not being done. For in assembly work any stoppage can cause a bottleneck with repercussions far beyond the point of stoppage. Jobs coming down the line pass by and workers further down the line cannot carry on, or parts needed in another section fail to be produced.**

Workers step back from the line or stand up. Foremen threaten or cajole the workers causing the production stoppage. Supervisors run about. For the moment at least the line may continue running. If the convenor can't effect a quick solution then the line is stopped. If a pile up threatened it may already have been stopped when the dispute arose.

At the point of the dispute foremen will be taking names. Each man is asked individually if he will start work. If he refuses he will be told he is "off pay", or he may be told to go to the office of the superintendent. If solidarity is good, the men will more than likely stay put, refusing to budge, holding their positions on the line. The shop steward will be called. More than likely he'll know exactly what the dispute is about before he is called. Sometimes he'll be at the centre of it, the mouthpiece of the section. Taking the men off pay is offensive. To the steward a provocation. He argues. The men must be put back on pay before the dispute or grievance can be discussed. At this point the dispute can erupt or dissipate. The steward will know the feelings of the men in his section, the context in which the dispute is taking place. Should they stick on it, or should they let it go? What about the question of pay? A meeting may be necessary. The numbers involved may be high, and the wishes of the men might have



to be registered, or time may be needed to spread the dispute to other sections. Should it be here, or in the canteen? The trip to the canteen means passing other workers who may still be working, or with no idea what the stoppage is all about.

The convenor will be called. If the dispute is a general issue already – a union issue – the stoppage may be prolonged a day or maybe more. The convenor's support for the lads in dispute will be tempered by how much support he can get from the union executive on this one, as well as by concern for those working in the rest of the plant. For if the dispute is not resolved, many more than those at its centre will be laid off without pay, and nobody will thank him for that.

The men cluster round the convenor arguing, shouting. More than likely he will try to get them back to work. Perhaps the condition will be that they get paid for the period of the dispute. Management will not give way on that unless they're desperate for production. The men and the steward want a meeting to discuss the issue. The canteen is suggested. The convenor stalls. Leave it to him. The issue is being discussed already by the union.

Balance of Power

Meanwhile the foremen will be at work on the less militant suggesting that they go back to work. If he judges it right the convenor will have a quick vote – a show of hands. If there's a majority for a return to work they go back and leave it to him. Maybe there'll be a section meeting later. The angry ones may even now down tools and go home – angry shouts aimed at those remaining or supervisory staff. No one takes any notice.

The line starts up, perhaps with a doubling up of workforce in the section to get rid of a backlog. Sometimes (if the men permit) the foreman will help. As the line starts the men move back into positions, unasked, almost on a reflex. A ripple of excited shouting and singing passes down the line. Whatever it was, management will be a bit more careful about trying it on another time.

There is no doubt that in the long run the balance of power lies in management's favour. Few believe they can really take on Ford Motor Company and win. **But the level of organisation among the workers in vehicle assembly, and the devices they have developed have given the workers considerable strength – the strength of a guerrilla force. In the day to day running of the plants, the balance is about even.**

Car workers pay a heavy price for their militancy. More often than not, taking any action means 'going off payroll'. Although this is bitterly resented by the workforce, it will not stop them taking action. The immediate reason for a dispute may seem trivial to an outsider, but carworkers within a car plant know quite clearly when a practice by management has to be stopped. It may not be a large issue, but the car workers can only be pushed so far, and if they have a grievance they will take on the management over it.

The following list is taken from a Ford convenor's report to his union executive on specific acts by management that have caused trouble and walk outs. They indicate the complexity and extent of the daily struggles on the shop floor of Ford car plants.

1. 5 men in the Paint Shop sent home for not accepting new manning standard, they were refused a Shop Steward. No one else would do the job, 2 plants laid off.
2. The same thing happened on 2 following shifts.
3. Shop Stewards suspended on wet deck for 4 days for advising his members against Supervisor's decision to cease practice of job rotation.
4. Man suspended for going to toilet without permission. 30 colleagues went off in sympathy.
5. Steward and 10 men suspended for not complying with instruction to take clock card to Supervisor after clocking on.
6. Material Handling Steward suspended for taking 20 minutes over permitted time to collect for widow. His members went out. Assembly Plant laid off.
7. Quality Control Steward sent home with some of his members for not accepting additional work. Same thing happened on following shift.
8. 300 men in Press Shop sent home for protesting about foremen setting lines during strike.
9. Body in White Line sent home for not accepting new work allocation which they claimed was impracticable. 200 men supported them, Plant was laid off.
10. 40 Tool Tryout men sent home for coming 9 minutes late back from lunch after having a meeting. Foremen attended to Press Lines, which caused:-
11. 6 Press Operators sent home for refusing to work on lines set by foremen. The rest of the Press Shop went off in sympathy.
12. Similar happened on the following shifts.
13. 2 Press Shop Stewards suspended, one for one day, one for two days for calling meetings regarding above. The result of this was that all Operators, Tryout and Toolroom went off for the two shifts the Steward was suspended for and the Body and Assembly Plants were laid off.
14. Material Handler suspended for refusing to drive truck loaded by Foreman. Rest of Material Handling went home in sympathy.
15. Steward suspended for swearing at Foreman, who was reading the 'riot act' to his section.
16. Sewing machine fitters told to accept additional functions or go home. District Official told management it was not in his opinion, their function. Men were taken 'off payroll'.

Wealth at the Top

Between them the three Ford brothers and their families receive $20million in Ford dividends each year.

In April 1977 Henry Ford II, grandson of the man who founded the company, announced an unprecedented move. He had decided to share the supreme executive position with two of his top cohorts – Lee Iacocca, president of the company, and Philip Caldwell, who left his job as chief of international operations to fill the new post of vice chairman.

Henry Ford II, now 60 years old and with a recent history of heart trouble, was setting up the structure for a transitional leadership to fill the gap after his retirement until another Ford is ready to fill the seat at the head of the table. The probable candidate is Henry's son, Edsel, 28, who is currently a Ford executive.

But in case anyone was under the impression that the old firm was suffering a rare case of democracy, Ford let it be known that he still retains the right to make the ultimate decisions. "I am the first among equals" said the man with his name on the building. "If something happens and there's no way to work it out on a consensus basis, then I've got, uh, an extra vote." (*Time*, 25.5.77)

The shuffle at the top seems to give Caldwell the edge on Iacocca as a candidate for the prime job in an interregnum – which must be humiliating for someone like Iacocca, whose aggressive ambition is summed up by the plaque on his desk bearing the single word WIN. Still, his annual salary plus bonuses, at $970,000, is equal to Ford's, and like many other top Ford executives over the years he is now a multi-millionaire.

Henry Ford himself, 'silver-sideburned jet-setter', is fabulously rich: 'With his glamorous second wife Christina Ford, Ford frequents the beaches of the Riviera, the jungles of Africa . . . wears Pucci ties to work, together with bright blue and white striped shirts monogrammed HFII' (*Dun's* November 1971). With 1,006,984 Class B shares, and 48,354 common shares, his annual dividends from Ford stock exceed $2.95million. Add in his $970,000 a year salary and bonuses, and you see one man earning almost $4million a year just from Ford – let alone his other investment income. His family are provided for independently too. They own 962,929 Ford shares bringing in some $2½million a year.

Eclipsed by their older brother in terms of power and prestige, Benson and William Ford are nonetheless Ford multi-millionaires. Benson owns 1,490,169 shares, William 1,805,667. This gives them well over $4million a year each, before their salaries and bonuses as Ford directors. Nor do their families have to live on this – they each hold over a million Ford shares, which gives them over $3¼million a year each.

Between them the three Ford brothers and their families, receive $20million in Ford dividends, year after year after year.

Lee Iacocca with 60,000 shares and an annual salary and bonuses, worth $970,000 at the latest count, is, according to a friend, 'not really interested in material things too much'. (*New York Times* 18.7.71) Iacocca's $200,000 home, with just one swimming pool, 'not nearly as extravagant as one might expect', is cited as evidence for this strange assertion. The man himself contradicts this friendly judgement. 'Quoting from a book lauding him as a prototype "buck-smeller", Mr Iacocca defined the breed as "men with the gutsy instinct for profits . . . that can smell a buck." Then he challenged his own team: "Are you a buck smeller – or what are you?"' (*Wall Street Journal* 15.5.73). Described by the media as the archetypal auto man, Iacocca is famous for his outspoken statements. Talking to Los Angeles car dealers of the threat from imports he starts: 'Twenty-five per cent of your investment is now in jeopardy . . . I tell you I been all over this market. I feel I know every Volkswagen buyer like my own brother, right down to how many wear beards. The Volkswagens are everywhere, like jelly beans. Now I got Toyota waiting in the wings, Datsun has not been heard from completely; neither has Fiat. It's a helluva stiff poker game going on here. Who's the enemy? Who are we after? Can we do it? . . . We're not here to hold them. We're here to push them down.' (*Life* 11.7.69)

The third member of the 'trimotor' that heads the Ford Motor Company is Phil Caldwell, clearly being rewarded for the performance of International Automotive Operations under his stewardship – the most profitable international division of any US auto company. 'Inside Ford Mr Caldwell is known as a professional manager, a hard-driving man who is very tough and knows how to manipulate the system . . . "he can kill you in a very civilised way," says another associate. "He carves you up but leaves the skin around the body." Before that had been the Philco hot seat.

'The family was sitting around a dinner table in Moscow in 1970 when the American executive decided to break the news to the children. Hours before they left Detroit for a Russian vacation, his boss at the Ford Motor Company offered him a new assignment: running the Philco subsidiary. Henry Ford II had himself called Philco "a can of worms". And in the Motor City, Ford is known for its somewhat Spartan philosophy – its warriors return with their shields, or upon them. Even the children knew about Philco. "Daddy," his 13-year-old daughter asked in Moscow, "if it doesn't work out, will Mr Ford throw you on the scrap heap?"' (*New York Times* 13.3.77)

Being sacked from Ford isn't such a hardship – if you're one of the men at the top. Back in 1969, Semon E. Knudson was pushed out of the company only 18 months after being lured away from GM with $850,000 worth of Ford stock, a five-year contract at not less than $200,000 a year, and the presidency of the company. His golden handshake was worth $683,000 – and he still had that $850,000 worth of Ford shares. Multi-millionaire Knudsen could say of his sacking; "Money is the least important aspect."

At that time Ford's 48 top executives were getting over $10million in salaries and bonuses. While tens of thousands of families have known the poverty of unemployment as Ford decides it does not need them any more, at the other end of the spectrum the company's history is peppered with those it has made rich beyond comprehension.

Ford's Common Market

The creation of the Common Market reflected the needs of private capital – just how much is evident from looking at the benefits Ford reaps from operating internationally in Europe.

While Ford has operated in many countries across the globe for decades now, the methods by which it does so have changed dramatically. Initially it was largely a matter of producing or assembling one model, the model T, in many different plants for an even larger number of markets. Then, gradually, local assembly became local manufacture and different models were developed for largely separate markets: American Fords for the US, Canada and Latin America, British Fords for the UK and the Empire, German Fords for Germany and so on. Partly this emerged from the inter-war protectionist era. As early as 1912 *Ford Times* had noted that in Germany 'the use of home products is regarded as a duty almost amounting to religion' (Hu, p25).

Also, the different models reflected local lifestyles and standards of living. In the US, large cars dominated and people could afford them. In Europe smaller roads, distances and incomes generally ruled them out. And since Europe and America constituted the developed world at that point, it was these two areas that dictated the design and development of the car.

Now, however, the industry is turning full circle, with European, American, Japanese, Brazilian and Australian cars all coming closer together in terms of design and size. And this has repercussions in terms of production. While methods have remained relatively uniform throughout, based on Henry Ford's original principles of mass assembly, **the opportunity has arisen over the last decade for new methods of organisation of production, on a much wider scale than at any period since the first two decades of the century. Ford have grasped this opportunity, to internationalise both products and production, and nowhere is this clearer than in their European operations.**

Before the Merger

Just a decade ago, before the formation of Ford of Europe, Ford had only two production, as opposed to assembly units in Europe. The first, and clearly the most important, was Ford UK, centred around the major complex at Dagenham and the new Halewood plant which had started production in 1963. In 1967, Ford UK's workforce of 60,000 produced 591,000 cars, trucks and tractors. In all, that meant some 9-10 vehicles per employee per year, many of them the higher value trucks and tractors.

By comparison Ford-Werke of Germany was small and its product range narrow. Its main capacity at that point was at Cologne in Germany and Genk in Belgium. The Genk plant was the newer, having been built in 1963, just after the Halewood plant, on a greenfield site. It was run as an integral part of the Ford-werke operation. Including Genk, Ford-Werke's 33,000 workers produced in 1967 378,000 vehicles of which the few commercial vehicles were small ones. That meant just over 11 vehicles per employee per year.

These levels of production made Ford UK and Ford-Werke together the third largest car manufacturer in the world outside the US. Only Volkswagen and Fiat produced more, and even the Japanese companies were smaller. But the two companies were not integrated; each had its own management, its own range of cars, its own components, its own outside suppliers and its own production facilities. And the two companies even competed with one another in some markets.

Transit Success

There was one exception to this, the Transit light van, and in many ways this was the precursor of what has happened since. Previously Ford-Werke had not produced commercial vehicles. The Transit was developed by the UK subsidiary, and then produced by both UK and Germany, for sale right across Europe. Instead of them competing with one another for markets with the Transit, the markets were allocated between them according to the respective strength of the sales organisations in those markets.

The Transit was a great success, and still is. Not only has it become market leader in Europe but, just as important to Ford, it opened up for the company new markets such as Italy. Largely on the basis of this one van, Ford became Europe's largest producer of commercial vehicles.

The lesson was clear. From having no CV production capacity at all, Ford-Werke were able to become Germany's third largest CV producer after Mercedes and Volkswagen. **What could have been a very expensive process had been achieved almost painlessly by exploiting the resources already available at Ford of Britain.**

Problem Fears

Ford of Europe was created in 1967 in order to integrate Ford's European wide operations. The management would have us believe that it was an innovative strategy thought out purely to strengthen the company's position in Europe. In fact it is quite clear that it was devised essentially as a rescue operation to solve Ford-Werke's problems. 1967 was a disastrous year for the Germany subsidiary, with total production of only 378,000 vehicles. Factory sales were even worse, at 330,000 cars and trucks – down 25% from 1966. Of the production, only 173,000 vehicles were produced in the German plants, where output was down by 32% on the previous year. Worse was to come, for although production was increased by 1% in 1968, actual factory sales were a further 7% down.

Ford-Werke was being caned by the competition, particularly Opel, Fiat and Renault.

Ford-Werke did not have a good or complete model range, nor was it a large volume producer, especially without the Genk plant. But it was based in Europe's fastest growing market, and the European market as a whole was growing very rapidly: Those manufacturers who could keep in the running could expect rapid growth:, in 1969, West European (EEC + EFTA) car production was to exceed US production for the first time.

'A new management organisation (Ford of Europe) was created to make all the critical decisions for both the British and German companies. There were obvious operating economies in the arrangement – the duplicate dealer organisations in third markets could be eliminated . . . Body development work was concentrated in Germany, power train development concentrated in Britain. "The pooling of the two companies," says Ford-Werke's (then) managing director Hans-Adolph Bartelmeh, "cut the engineering bill in half for each company, provided economies of scale, with double the volume in terms of purchase – commonization of purchase, common components – provided the financial resources for a good product programme at a really good price that we could still make money on."' (Forbes, 1.7.72)

For instance, while Ford UK was well advanced, with preparations to launch the new Escort, Ford of Germany had no small car with which to compete in its markets. Ford of Europe urged them to take the Escort. "'We kept saying to them," one Ford of Europe executive recalls, "Are you sure there's no market for it? It's going to be cheap. You don't have to pay for the tooling, it's already been tooled."' (*ibid*) Not surprisingly, Ford-Werke put the Escort into production at Genk in 1968.

It was followed in quick succession by the Capri in 1969, then a new Cortina/ Taunus range (which leant heavily on experience gained by Ford UK with the extremely successful Mk I and II Cortinas) in 1970, and the Granada range in 1972. In just four years Ford-Werke's position had been transformed. It now had a full and competitive model range. In addition, it had added another major manufacturing plant, at Saarlouis near the French border, in 1970. In that year, it overtook the UK subsidiary as Ford's leading European producer of cars and CVs, and has continued to go from strength to strength.

Yet looking at the accounts you can make no sense of it whatever. Over the last ten years Ford-Werke claims to have increased production by 215%; sales revenue 350%; and profits by 2,305% (admittedly from an unusually low base to a suspiciously high peak). It has, quite clearly, expanded considerably. Yet over those ten years, total assets (i.e. the money invested in plant equipment and stocks etc) have risen by just 13%, from DM2,531million to DM2,868million.

It would seem that Ford-Werke was having problems getting its sums right between 1969 and 1975. Turnover rose steadily during that period, apart from the slump year of 1974. Yet it was not until 1973 that profits exceeded those of 1969, and then by only DM43 million.

Cooked Books

One explanation for these accounts is that since 1967 the company has run especially heavy depreciation charges, thus reducing profitability and holding total assets down. Over the ten year period 'depreciation and tool amortization' has exceeded 'additions to fixed assets and special tools' by DM306.2million: at that rate, by the year 2007, Ford-Werke will have modern, up to date plants capable of producing 6 million or more cars and CVs a year . . . and the value of the assets producing them will be written into the accounts as a few DMs . . .

It makes sense only in the context of Ford's aim of rapid expansion in Europe, and particularly around the Ford-Werke operation. What was the point of declaring profits which would be taxed, when heavy capital expenditure could be written off by heavy, untaxed depreciation; Ford could write up the accounts whichever way suited them best. Small wonder then that, after the German government had announced that from 1977 profits remitted overseas would be taxed at a higher rate, the Ford-Werke profits for 1976 revealed the massive increase. Conveniently, they were just large enough to allow a full 100% dividend for the parent company.

The Price is Right

Only the Ford Motor Company management knows what prices are charged for intercompany transactions. When the Escort was put into Genk, for instance, what charge was levied by Ford UK against Ford-Werke for the research and development charges, let alone the tooling? According to the Ford UK Report and Accounts, all research and development costs are written off as incurred; to which subsidiary was the R&D for the Fiesta, to be produced by Ford of Spain, charged as it was incurred? Why does Ford-Werke borrow funds from the Ford International Capital Corporation of Hamilton, Bermuda? And how is it that, in a year when Ford-Werke needs to boost profits so that a 100% dividend can be paid, a major part of that profit boost arises from a combination of 'exchange rate gains achieved in payment transactions' and 'revenues for services charged to affiliated companies' (Report and Accounts 1976)? When Ford wanted the German subsidiary to produce high profits, what was there to stop them adjusting the price charged for Capris or Granadas sold to Ford UK accordingly?

This becomes apparent when you look closely at the record of Ford of Britain. The Annual Report and Accounts reveals only vehicle sales, rather than production. Over the ten year period 1967-76, sales peaked at 712,000 as far back as 1968. And in that year, production was even higher at 722,000 vehicles. Compare this to 1976, a year of record profits for the British company. Sales were only 644,000, and production just 600,000 – 122,000 vehicles less than in 1968.

This 'decline' is even more marked in terms of the number of vehicles produced by each worker. This also peaked in 1968, at 11.8 vehicles per worker. In 1976, it was just 8.8 – each worker, apparently, made three less cars than his

Ford-Werke – all things to all accountants

	1967	*1969*	*1975*	*1976*
Production (cars + CV) (1,000s)	378	614	635	813
Sales revenue (DMmillion)	2,493	3,884	6,366	8,657
Profits (DMmillion)	26	209	283	628
Total Assets (DMmillion)	2,531	2,876	2,796	2,868*

*excluding dividends

Popperfoto

Keystone

Top: UAW leaders pledge support to Dagenham strikers. 1971

Bottom: Dagenham at a halt over lay-off pay. 1977

or her counterpart had done a decade before . . .

Ford of Britain

Year	*Vehicle Sales*	*Vehicles Produced*	*Work-force*	*Vehicles/ Worker*
1968	712,000	722,000	61,000	11.83
1973	674,000	652,000	71,000	9.18
1974	602,000	580,000	70,000	8.29
1975	534,000	532,000	67,000	7.95
1976	644,000	600,000	68,000	8.83
Ford-Werke				
1968	395,790*	381,194	37,098	10.28
1976	811,140*	812,798	52,929	15.36

*excluding imported vehicles: 1968 – 2,525, 1976 – 10,498.

By the same crude measure, the productivity of the workforce of Ford-Werke increased rapidly over the same period, so that by 1976 it was near double that of the British workforce.

Is this just another manifestation of the 'British disease', of low productivity and a recalcitrant workforce? At first sight it would seem so. Yet does anyone really believe that Ford would have accepted such a decline in productivity? The answer lies in the increasing amount of component manufacture in Ford's British plants.

Scapegoats

The constant vilification of the car-worker as one of the prime culprits of Britain's economic decline has been a constant theme of both Labour and Conservative politicians over the past decade and beyond. In 1969, for instance, Harold Wilson, then Prime Minister, was busy warning strikers of 'the danger that in the Ford factories of Europe, there may be a growing determination not to be dependent in the future on British components whose delivery can be so frivolously imperilled'. (*Financial Times* 16.3.69) The speech was doubtless inspired by Ford management. They have been as quick as any to exploit the political climate.

It was in 1971 that Henry Ford II launched his famous attack on British Ford workers, threatening no new investment. As recently as July 1977 Bill Hayden, a

Ford of Europe VP, returned to the theme: 'Ford UK has ruled out all prospect of investment in further car capacity in Britain until productivity at its two plants at Dagenham and Halewood show signs of reaching Continental levels . . . ' According to him, Britain is 'bottom of the league in its ability to compete as a secure and profitable supply source' (*Ford News*).

Tails You Lose

Then there are the constant, insidious comparisons with Ford plants in other countries. Workers at Dagenham are told that it takes them 75% longer to build the Cortina than it takes the workers at Genk. *Ford News* tells the Halewood workers that that plant has an abysmal record in meeting production targets in comparison with the European plants. And, of course, the German workers are told of the great difficulty that the appreciation of the Deutschmark is causing, making the German plants less competitive than those in Spain and Britain.

The impression put across is that Ford is the victim of circumstances, forced to act through worker militancy, appreciating currencies, political constraints or whatever. Nothing could be further from the truth. The company's strategies are directed at extracting more – more work, more cars, more profits. They are not a response to problems as they arise.

Ford's decision to switch major investment to Germany was taken in the mid-60s. It was made despite the strength of the British subsidiary, rather than because of its problems. And that decision was being put into effect well before Harold Wilson and Henry Ford II issued their stern warnings.

The significance lies in the way in which Ford of Europe was developed. At Ford-Werke assembly was expanded rapidly, whilst increasingly, Ford of Britain has emerged as a component manufacturing operation.

The reason lies in the different nature of these operations. Assembly is labour intensive, heavily dependent on the workers on the line. It is also the weakest point in Ford's production chain, where all the components are brought together. When the line stops, all the money that the company has poured into those components is frozen, and the only way out is to get the line going again.

It obviously makes sense for Ford to concentrate assembly where it has the most strength vis-a-vis the workforce. In Saarlouis, for example, there is high unemployment. The company recruits migrant workers for the worst jobs: they are dependent on Ford for permission to stay, and that depends on good behaviour. What's more, wildcat strikes are illegal. Small wonder that production targets are met day in and day out.

The Squeeze

Component production, on the other hand, is more capital intensive: the emphasis shifts more to the machine. Militancy is usually less in component manufacturing plants, and Ford has more control of production in that stock piling, dual sourcing or shifting tooling are possible. So the power imparted by anti-strike laws and the status of migrant workers is less important. Expanding assembly in Germany and component operations in Britain offered Ford the chance of squeezing the maximum productivity out of the combined work force of the two countries.

Ford can largely afford to ignore the wage differentials between plants in different countries. One reason is that direct labour costs represent only a comparatively small proportion of the total cost of a car, and with Ford's integrated European production the labour cost in any one car is spread between different countries (see table).

Even in Germany, direct labour costs account for less than 15% of the net price Ford receives for the car. And the differential between Spain and Germany is insufficient to justify sourcing the German market from Spain. This would mean extra costs in the form of freight and insurance from Spain to Germany ($106), and import duty into the Common Market ($96).

For Ford, cutting labour costs does not involve chasing cheap labour round the continent. It means, rather, ensuring that the maximum is extracted from each and every worker. The spread of plants enables the company to engage in an international merry-go-round: winning or claiming productivity increases at one plant, and then demanding that they be accepted elsewhere. The underlying threat behind these demands is that of withdrawal of

Fiesta costings – Ford internal data Autumn 1977 for 1977

	Car assembled and sold in		
	Britain	*Germany*	*Spain*
Direct labour costs[1] in:	$	$	$
Britain	1,215	29	28
Germany	70	370	37
France	51	51	50
Spain	38	38	182
Totals	374	488	297
Total direct costs[2]	1,975	2,190	1,879
Gross profit per car[3]	1,091	1,153	821
Net sales revenue per car[4]	3,066	3,343	2,700

1. Labour costs portion of variable costs.
2. Total corporation variable costs.
3. Corporation economic profit.
4. Corporation sales revenue.

Variable costs are those that vary according to the number of units produced – raw materials, labour costs etc.

the work, but the threat is more rhetoric than truth.

Ford's Law

The playing off of one workforce against another is matched in Ford's relationship with governments and consumers. In both cases the identification of the national subsidiary company with each country is important. Ford exploits its acceptance as a domestic manufacturer in many countries of Europe. It laps up the benefits, from customer confidence to state support. Each national subsidiary goes to the government in turn, asking for more public support than has been offered elsewhere. The investment ends up where it would have been anyway, but the cost to the public purse is just that much greater. Yet, as we saw with the recent Bridgend investment decision, Ford emerges at the end as the 'model citizen', lauded by prime ministers and press pundits alike.

Though the company exploits its national identification, it is dependent on and beholden to no state outside the US. The Spanish government passed 'Ford's Law' – a special statute exempting the company from many conditions of the laws regulating foreign ownership of investments, minimum local content etc., but even this will not ensure the company's allegiance. Ford's integrated international operations ensures that the company remains free to shift profits where it wishes, and to concentrate investment in those countries that best suit its purpose.

Dumping?

The 'Federal' Fiestas built in Germany, for example, are exported to North America. 85,000 were sent in 1977. Ford's internal figures show that on sales of the Fiesta in Germany the company makes a gross profit of $1,150 per car. Their figures for those exported to North America show a gross profit of just $662 – meaning that almost certainly the car is being sold at a loss in the US. The benefits to Ford US are market expansion, lower average fuel consumption and emission, and another opportunity to transfer profits. Does the US parent fully compensate the German subsidiary? It seems unlikely. In the same way, despite the great claims Ford makes for the success of the German subsidiary, it is noticeable that all major recent expansion has been placed outside that country.

Acceptance of Europe as a single unit in terms of both production and sales meant much more to Ford, as a US based car manufacturer, than it did to the European automakers. Above all, Ford is much freer to move within the confines of the EEC than they are.

Border Clash

The location of the Saarlouis plant illustrates this clearly. The company had originally intended that this plant should be built in the Strasbourg area of Northern France. While conveniently close to the German border, it would have the political advantage of establishing a Ford manufacturing presence in France. But the nationalistic mood prevailing in France at the time meant that the deal was effectively blocked. Ford simply found a new site, just across the border in Germany and built the plant there. It drew heavily on French workers, 'who crossed the border every day to work, paid taxes to the German government, credited the German Balance of Payments, and exported Escort cars to France' (Hu p.172).

Ford's freedom to dodge from one country to another is in stark contrast to the pressures on domestic companies to not only stay within national borders but to go to prescribed areas within them. When Alfa-Romeo set up a huge new plant to produce the Alfa-Sud, for instance, political and economic pressure could easily be applied to ensure the plant was established in less industrialised Southern Italy. Similarly, in 1977, Renault came under heavy pressure to build a large new plant in a less developed part of France. No such pressure could be applied to Ford.

The French soon learned to play things the Ford way, however. Ford was still eager to establish a manufacturing presence in France, but on its own terms. Eminent politicians, particularly Chaban-Delmas, soon to succeed Pompidou as Prime Minister, wanted to make political capital out of attracting new investment. Not surprisingly the site chosen for the next major new Ford factory was Bordeaux, Chaban-Delmas' own constituency. As an added incentive, Henry Ford II promised Georges Pompidou at the same time that Ford's next European assembly plant would be built in France.

Ironically the Bordeaux plant's products only served to underline the increasingly international nature of Ford's production. It would build just one major component, automatic transmissions to fit smaller engines (up to 3 litres), all for export. The plant was opened in 1973, and by February 1977 had produced 1 million units. Of these 645,000 went to the USA for the Pinto and Mustang, 249,000 went to the UK, Genk and Germany, and the rest went to South Africa and Australia.

Fiesta

The increasingly international nature of Ford's production, is best shown in the case of the Fiesta. The Fiesta was developed as an entirely new addition to Ford's range of cars. As a result the company started with an almost clean sheet when it came down to both its design and the decisions on how and where it should be produced.

The Fiesta had to be a front wheel drive mini-car to enable Ford to penetrate the important markets of Southern Europe where such cars account for a major part of the total market. Ford, at the time the project was first conceived in 1969-71, had had no recent small car experience; had only bad experiences of front wheel drive; did not have sufficient spare capacity in Europe to support what would necessarily have to be a large volume project; and had no capacity whatever for front wheel drive components.

What was clear was that a huge total investment would be necessary. In the event it was over $1billion – almost beyond the capabilities of Ford of Europe alone. That it was undertaken partly in the midst of the severest recession since World War II and without any huge traumas such as Volkswagen experienced in the development of its new models, demonstrates the importance of the US parent company's far larger resources for Ford of Europe – a major international carmaker in its own right.

Into Spain

In fact the parent company undertook the initial two years' development work, which was carried out in Detroit. It was the parent company's AAA credit rating that made raising what finance was needed for the Ford Spain investment no more than a matter of technicalities. As in all major projects, it provided considerable manpower and technological input. And, above all, the fact that, ultimately, it was the Ford main board that took the decisions, placed it in a very different perspective from that of a European manufacturer contemplating a $1billion investment.

Given that the parent company spends between $1billion and $1.4billion annually on expansion, modernisation, replacement of facilities and special tools, $1billion or so over five years on the Fiesta is little more to the company than a hiccup: And to place it in its true perspective, note that in 1976 alone the shareholders' gross profits amounted to $1.7billion.

The Fiesta programme had two main elements: the creation of new or expanded manufacturing facilities on the one hand, and the production of a new Ford mini on the other. Initially, these were considered as two separate projects; Ford intended to start manufacture in Spain with or without the mini, and vice versa. And the company anyway sees investments in new manufacturing facilities as a much longer term matter than it does its investment in one particular model. The original intention was that Cortinas and Escorts for southern European markets should be sourced in Spain.

Pastures New

Ford's plants form the nucleus from which the company hopes that future production will be expanded. As such, new additions are located to fit its long term global perspective. Ford's European sales in recent decades have been concentrated in the north; in Germany and Britain, Belgium and the Netherlands. In the rich markets of France, Italy and Spain, as well as in the other poorer, but developing Mediterranean markets, the company's sales were and are comparatively tiny.

The extent of Ford's desire to get into those markets is revealed by company documents from 1972. At that time Ford was selling Escorts and Taunuses in those markets at a price that meant a loss of around $95 a car.

There was also the attraction of the cheap labour available in Spain compared to other European countries (including Britain, when the project was first considered), and the repressive ruling regime.

Spain was geographically an integral part of Europe, and a Ford plant there could be an integral part of Ford's European production. At the same time, it would locate the company in yet another country, further spreading the long term political and economic risks that might face the American multinational.

The new Spanish plant and the Fiesta came together because both were pitched centrally at the same target – rapid growth through opening up the southern European market. Iacocca had his own way of putting it. ""We are not Ford-Europe. We are Ford of a half of Europe! And that is what we'll remain as long as we can't provide the cars that the other half wants . . . We can't go on forever importing foreign workers into northern Europe. It's time to go and build our cars in the places where the manpower already exists. Let's export the factories and stop importing the men!"' (*Seidler* p41)

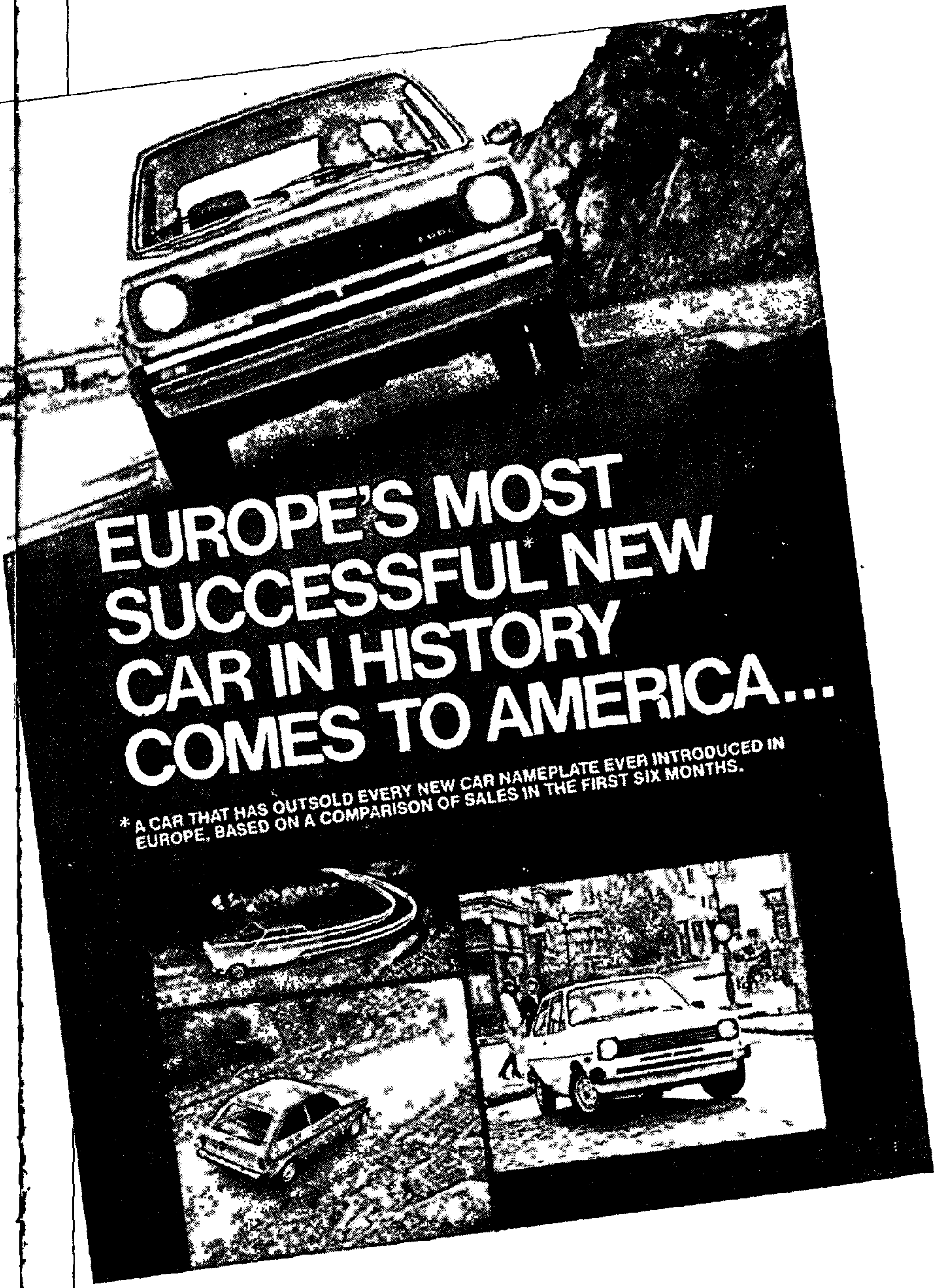
Planning the Fiesta for production anywhere and with components to form the basis of Ford's next generation of small US cars was a major operation. It meant designing not just a saleable car, but for profit, taking into account all the complex relationships involved in manufacturing. That meant considering not just the use and shape of a component or assembly, but also the way in which it would be produced – including by whom, and at what rate. It meant taking decisions on what productivity levels could be achieved without taking the worker past the point of revolt, and then judging methods and designs accordingly. The target throughout was the maximisation of Ford profit, the constant increase of Ford production; as much to be won as possible at the expense of the worker.

Cost Cutting

The Fiesta uses fewer different parts – 1394 compared to 2140 for the Escort – and each is produced in larger numbers and by fewer workers as a result. Fewer components means less to be assembled, so that fewer assembly workers per car are needed. And the new techniques and processes introduced round the Fiesta are centred round increased productivity. But it all depends on the workers' acceptance of what the company demands. Small wonder the operations manager at Dagenham was so pleased with the Fiesta. "From a production point of view it's the best design we've ever had to handle. It's a straight-forward, assembly job . . . ". (*Ford News* 10.12.1976).

Because of this the Fiesta is cheap for Ford to produce – it was designed to cost the company significantly less than the very profitable Escort. There is no doubt that the company is achieving its cost targets, but this is not reflected in the price to the customer. The motor industry is an oligopolistic business – a comparatively small number of manufacturers dominate each sector in each market. As a result they do not compete on price. Instead, price levels reflect the costs of the less efficient manufacturers – and the larger companies with lower costs such as Ford make disproportionately large profits.

There seems little doubt that the company could sell the car profitably, in its established markets in particular, at a much lower price. But Ford does not need to do so: it can take a large profit and still sell the cars competitively, as many as it


EUROPE'S MOST SUCCESSFUL* NEW CAR IN HISTORY COMES TO AMERICA...
* A CAR THAT HAS OUTSOLD EVERY NEW CAR NAMEPLATE EVER INTRODUCED IN EUROPE, BASED ON A COMPARISON OF SALES IN THE FIRST SIX MONTHS.

has the capacity to make. In Britain, for example, the basic Fiesta is priced above the basic Escort – even though the Fiesta was designed from the first to cost Ford less than the Escort.

The international pattern of the Fiesta's production was planned within the same rationale. It involves the transport of components and sub-assemblies over vast distances, and the assembly of the car itself at not one but three locations in Europe. What is certain though is that any extra cost involved in this complex multinational production operation is, or will be, amply compensated for by savings elsewhere.

Fiesta Jigsaw

The main manufacturing centres for the Fiesta are as follows:

Engine:

Castings for all engines	Dagenham, UK
Machining and assembly:	
1,000cc	Valencia Spain
1,100cc	Valencia Spain
1,300cc	Dagenham UK
1,600cc	Dagenham UK

Body Panels:

Dagenham UK
Genk Belgium
Saarlouis Germany
Valencia Spain

Transaxle gearbox (for front wheel drive):

Dagenham UK
Valencia Spain
Saarlouis Germany
Bordeaux France

Final assembly:

In addition, other important components and sub-assemblies are also produced at the following plants:

Basildon, Dagenham, Enfield, Leamington, Treforest in Britain; Genk in Belgium; Belfast in Northern Ireland; Cologne, Saarlouis and Wulfrath in West Germany. Some components for the US version are even supplied from Ford division in the USA.

So we have the picture of carburettors being supplied to Saarlouis, Dagenham and Valencia from Ford's Belfast plant. Die cast transaxle casings and gear components are sent from Cologne to Bordeaux; the completed transaxles are sent from there to Saarlouis, Dagenham and Valencia. These three assembly plants, each with its own stamping plant, share with Genk the supply of body stampings. All cylinder block and head castings for the 1,000cc and 1,100cc engines are produced in Dagenham, and then sent to Valencia to be machined and assembled. Some built up engines are then sent back to Britain, for installing in Dagenham built Fiestas. At the same time, Dagenham is the sole source for the 1300cc and 1600cc (US) engines – simply very lightly modified Escort engines. The US engines are sent to Saarlouis, where they are mated up with transaxles from Bordeaux before being installed in the safer Fiestas assembled there and sent to the US. And so the list goes on.

Balancing Act

What Ford has done is juggle with the different factors: economies of scale; transport costs; market locations; dual sourcings; existing capacity and specialisation; attainable production rates; political considerations. Possible combinations have then been costed as far as possible — down to, for instance, the cost of extra stocks to allow for transit time, including 40 day stocks of component sole-sourced from Britain as opposed to the usual 20 days. There is even an allowance of an extra 2% on UK French and Spanish labour costs to allow for a lower 'confidence level of achieving the total capacity installed as against Saarlouis'. (Ford internal documents) The decisions on what is made where are then made on the basis of both cost data and the unquantified criteria — such as the political aspects and Mr Ford's personal whims. As the Economist Intelligence Unit put it, the Fiesta 'is the first car to make full use of the integrated Ford of Europe manufacturing base . . . The precise political and engineering balancing act has been delicately achieved' (March 1976).

The Battleground

The Ford Motor Company has invested enormous sums of money in the Fiesta, purely in anticipation of lucrative profits. Just how lucrative depends on the extent to which the company can keep the plants at Dagenham, Saarlouis and Valencia churning out car after car, day in, day out. Every interruption to production, every car lost, means a sliver of icing lost from the top of the cake.

It means that Ford must ensure a constant flow of components and materials to the assembly lines and, having done so, keep the lines moving as fast as possible. It's partly a technical problem, partly one of dealing with outside suppliers. But above all it's a matter of Ford's ability to cope with the constant battles for control of the shopfloor.

The international nature of the car's production will, the company hopes, serve it well in this respect. Partly it's a matter of flexibility. Many components, sub-assemblies and even complete cars are either dual sourced or can be substituted by similar products made elsewhere. In the event of a dispute at one plant, for instance, the company can attempt to boost production at the alternative source. Coupled with stockpiles and stocks in transit, this may enable it to withstand lengthy disputes. Even the long supply chains may be an asset; stretching right across Europe the goods in transit can be used during the dispute, and then replaced by rush transport after the dispute.

So in the event of a shutdown of the Dagenham Fiesta engine line, the company's aim would be to boost output of the Valencia engine line to supply extra units to the Dagenham and Saarlouis assembly lines. With a higher output of the Valencia engined cars from these two plants, stocks of the Dagenham engines could be stretched out to minimise interruptions in supply of any model. Similarly, if the Valencia engine plant were shut down, the Dagenham engines plus stocks of Valencia engines would enable the Saarlouis and Dagenham assembly lines to maintain production even if the dispute were long drawn out.

Control Tactics

Not all components are dual sourced though, for the temptation of higher profits through economies of scale has tempted Ford to single source a number of components. These include the transaxle units (Bordeaux), engine castings (Dagenham), radiators (Basildon) and carburettors (Belfast) on the Fiesta, as well as a number of body panels produced at various plants.

An effective dispute in the sole source plants could hit the company hard. In some cases, if the situation warranted, it might be possible to take out the tooling and shift production elsewhere. But that is not always possible. Closure of the Bordeaux plant, for instance, would inevitably halt all Fiesta production the moment that stocks were exhausted, bringing the flow of profits from Fiesta sales into Ford's coffers to an abrupt halt.

It is most unlikely that the company would take such a risk without careful protective measures. That would indicate in the first place an established monitoring system to gauge militancy in the more important plants, for while continuously high stock levels would be prohibitively expensive, a strategic build up of stocks before a dispute would be invaluable. Again, it would be better for Ford to provoke a strike at a time of its choosing, than wait until militancy, commitment and confidence on the shopfloor have built up. This also depends on successful monitoring of the situation on the shop floor. But such tactics can be very successful for the company.

All these options, and ultimately Ford's ability to retain control of the shop floor, depend on a lack of concerted action by the workforce. The company depends on management's flexibility to outflank workers' actions. The most serious threat to that flexibility is organisation of the workforce across the company as a whole. The trouble is that the international spread of production poses a major barrier to wider shop floor organisation.

It's difficult enough for Ford workers in one country, sharing a common language and separated by comparatively small distances, to organise effectively against the company on anything more than a local plant or shop level. Even here, major problems of communication, sectionalism and cumbersome national union machinery arise. On a European scale the problems are multiplied many times. Workers in France, Germany, Belgium, Spain and the UK use six different languages plus those of the immigrants. It means much greater distances — over a thousand miles from Halewood to Valencia, with disproportionately large travel and telephone costs as a result. There are that many more unions — and another layer, the international union organisations, on top. But those links have to be built and the battles fought when and where they arise.

Working on the Workers

"The reason they're frightened is that they know if they lose their job at Ford, there's such unemployment round these parts that they might never get another job."

In the day to day struggles on the shop floor, it is immensely advantageous to Ford that the workers do not see beyond the local management to the world-wide strategy that governs Ford.

The national character of workers' organisation, both of shop stewards and of Trade Unions, only assists Ford management. A multinational company like Ford can only be the winner if its workforce is divided between nations. There are several strategies that Ford managers use in the constant attempt to maximise profits that we can isolate and examine.

Ford selects the sites for its new factories carefully. Proximity to markets is important. But there are long term advantages to management in locating plant in industrial areas where traditional industries are being run down, where workers are already industrially trained, and whose commitments and expectations increase their dependency on the work Ford will offer.

Ford's arrival in Halewood in 1963 was typical. 'Merseyside and Lancashire was a depressed area. Traditional industries were in decline. Unemployment figures were high and wages were low. Ford's had the pick of the labour market, and the Company followed a recruitment policy which was consistent with its aim of obtaining a trouble-free plant on Merseyside . . . It aimed to recruit the cream of the labour market . . . the unemployed were regarded with some element of suspicion.' (Beynon p.89) This was 1963. In the same year Ford were building a plant in Genk, Belgium.

'It is situated in the countryside outside the small industrial town of Genk . . . In the early 60s Belgian coalmining was in decline. As it formed the backbone of economic activity in the province of Limburg there was large scale unemployment and anticipated unemployment. The provincial authorities and the trade unions constantly pressed the government for other forms of employment and new investment' (*Solidarity* Vol 5 no 6). **Both outside and inside the United States, Ford has grown on the backs of the mining, engineering, steel and shipbuilding industries. The privations and stresses of working in a Ford plant have been forced on people brought to desperation point – victims of the fluctuations of capital.**

Place	*Date*	*Local Industries*
Halewood	1963	Shipyards, docks
Genk	1963	Coal mining
Swansea	1965	Coal mining, steel
Saarlouis	1970	Coal, steel
Bordeaux	1973, 1976	Shipyards
Valencia	1976	
Bridgend	1980	Steel

At Genk, 'The Ford company welcomed this situation. It was prepared to erect a new factory but only on its own terms." (*Solidarity*) These conditions resembled

Ford Workers' Group Dagenham

those accepted earlier by the trade unions at Halewood: 'a running period, in this instance of five years, with lower wages than were being paid in other Ford plants in the country.' (*ibid*). The Belgian trade unions, just like the British, signed the agreement on Ford's terms.

Although Ford had to invest in new plant in Europe, there was money to be made by playing hard to get.

Site for Sale

In December 1976, the British Steel Corporation took out advertisements in the financial pages of the newspapers. The British steel industry was being run down, and the government and British Steel had assembled a package to try and encourage new investment in the areas affected. Worst hit would be Blaenau Gwent, Cardiff, Hartlepool, Deeside, Cambuslang and Motherwell.

'We can provide a unique mix of resources and services to incoming industry.

* A reliable and flexible workforce, comprehensive retraining facilities
* First class fully serviced industrial sites – new factories or custom built
* Attractive financial incentives.'

Business managers who responded to the advert were sent glossy brochures packed with information on sites, workforces and financial 'gifts' for the investor. "The British Steel Corporation's East Moors works in Cardiff will be closed sometime after January 1980 and **a workforce of about 4000 people will become progressively available for recruitment into new industries.** Appoximately 50% of these people will be under 50 years of age . . .

The management and workforce have a wide range of skills . . . **The East Moors works has a long history extending over 40 years of first class industrial relations and can boast that over this period production has never been seriously affected by any major dispute.**

The workforce has adapted readily to new processes . . . and the recent achievements of the works over a number of difficult years, have reflected a high degree of resilience and loyalty.' (Cardiff Brochure, British Steel, p.4)

In September 1977, Ford announced that it was to come to the area and set up a new engine plant at Bridgend. The Welsh Development Agency was overjoyed. The papers were filled with pictures of smiling local notables standing on a piece of wasteland in front of a sign saying: 'cedwir safle hwn ar gyfer ffatri newydd – Ford Motor Company'.

Just who had the trump card in the whole deal can be guessed. Holland, Belgium, France, West Germany, Spain and Ireland had all competed for the plant, as well as internal competition within Britain. The Berlin authorities had offered Ford a 'package' that 'staggered the city officials' so desperate were they to 'inject new life into a dying city'. Saarland was also offered to Ford. **Site after site, whole communities, workforces, futures were offered up as government officials vied for the investment, offering bigger and bigger inducements. It was even suggested** that British taxpayers should pay for the investment, should pay Ford to produce engines in Britain. In the event, and given the size of the government subsidies, this is virtually what happened.

After the decision was announced, it was revealed that Henry Ford himself had been to Britain to see prime minister Callaghan and the union leaders Scanlon and Jones. He had won commitments from them in return for the new investment. Ford had visited the Swansea factory and spoke in private to Brian Phillips and Terry Bennett, the two main convenors at the Ford factory in Swansea. Ford concluded: "Wales has the most intelligent and articulate labour force in the world." (*Sunday Times* 9.10.77)

The people within working distance of the Bridgend plant were not aware of it, but they had had their first taste of Ford's multinational strategy. The investment is coming – half paid for by the British taxpayer anyway – and already the onus is on the area to show its gratitude to the Ford Motor Company. Resistance to any Ford decisions will be met with threats to pull out – unsatisfactory levels of production will be matched against what workers in Dagenham, Valencia or Cologne are doing.

Bridgend is now on the Ford 'merry-go-round', and the hallmark of that merry-go-round is a feeling of helplessness in the face of the company's decisions. Certainly government and unions sacrificed considerable political control and independence in return for the short term economic benefits Ford offered.

The People Say Yes to Ford

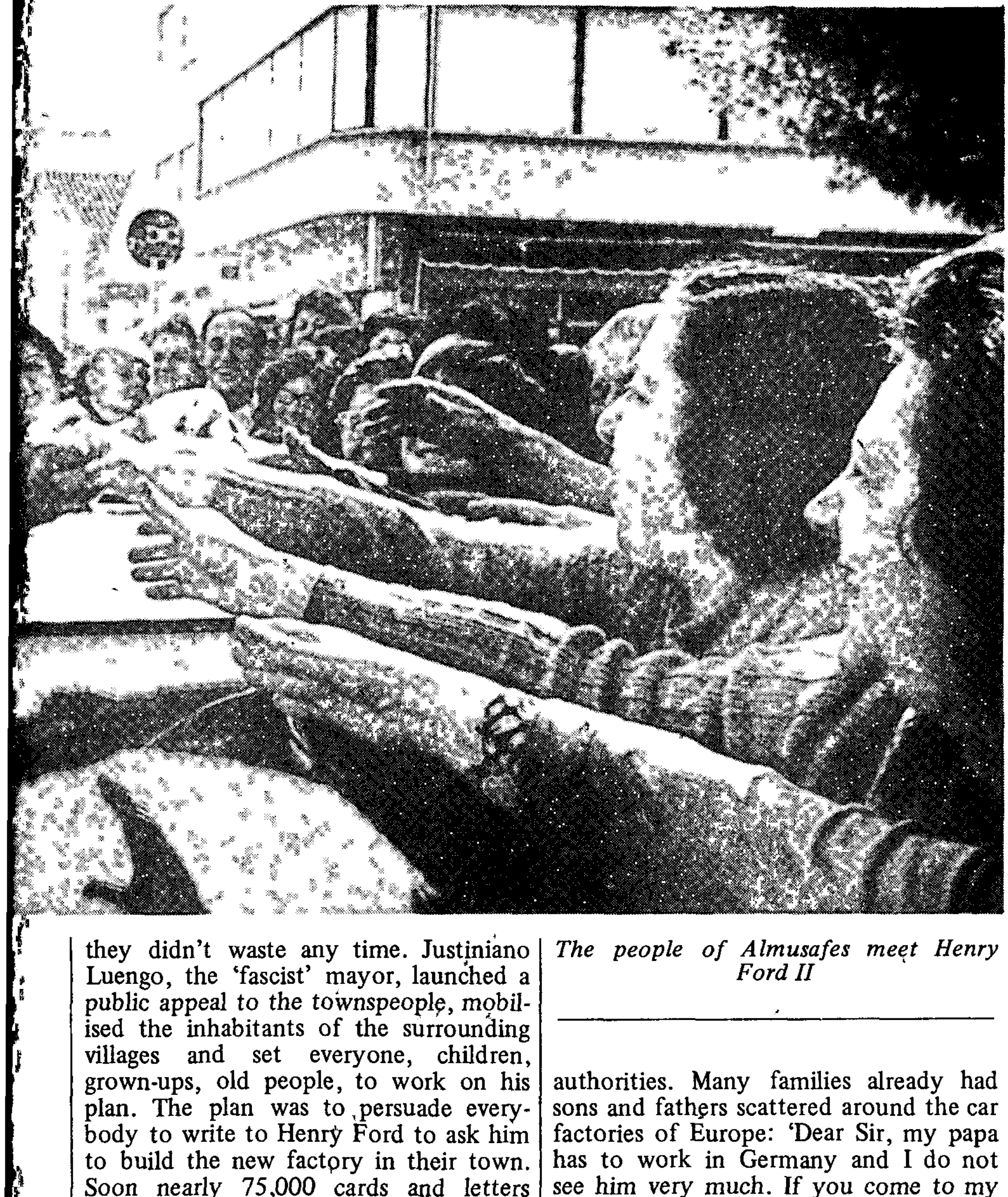
'The two men stepped on to the balcony and looked down on the crowd.

"I have some news for you", said the mayor. "Good news. Ford is coming to Almusafes."

Bosch hugged Ford's envoy. The crowd went wild with joy. They jumped, they danced, they embraced each other. The party went on late that night. Next day, the papers in Valencia and Madrid carried big headlines: "The people say Yes to Ford!"' (*Seidler*)

By the beginning of 1973, everyone in Spain knew that Ford was thinking of building a new factory there. They also believed, as many have believed before them, that it would be a bonanza for the town that was chosen.

'At Talavera de la Reina, near Toledo,



The people of Almusafes meet Henry Ford II

they didn't waste any time. Justiniano Luengo, the 'fascist' mayor, launched a public appeal to the townspeople, mobilised the inhabitants of the surrounding villages and set everyone, children, grown-ups, old people, to work on his plan. The plan was to persuade everybody to write to Henry Ford to ask him to build the new factory in their town. Soon nearly 75,000 cards and letters arrived in Dearborn.' (*Seidler*)

The fascist trade unions in Seville offered Ford free land 'with no limitation' and 'as much help as we are able to give'.

The site that Ford actually chose was outside Valencia. The Mediterranean is three miles away, with access via a lagoon. Between the orange groves were fields of artichokes, onions and lettuces, and beyond them rice fields. The land was divided into tiny plots, all around the village of Almusafes. And the villagers of Almusafes were by no means enthusiastic about the new factory. 636 of them, who owned plots on the proposed site, showed a marked reluctance to sell. The Spanish government authorised compulsory purchase.

The resistance was limited. The Government wanted Ford, and so did the civic authorities. Many families already had sons and fathers scattered around the car factories of Europe: 'Dear Sir, my papa has to work in Germany and I do not see him very much. If you come to my town, my papa can work for you. He works very hard and will be able to come home every day to play with me.' (Letter to Ford from Pepe Lopez) In the event, most of the local families signed away their land.

"Just look at those fields" intoned John McDougall of Ford Europe. "Down there we're going to make 400,000 engines a year. Here on this bare hillside we're going to instal the Press Shop. And over there, where you see that old onion field, we shall be assembling 300,000 cars a year. Fantastic." (*Seidler* p154)

The only orange tree that remains stands on a plinth outside the entrance to the factory. It has been chromium plated – for posterity.

Less than three years later, in September 1976, teargas drifted across the assembly line and into the Press shop of the new factory at Almusafes. This was the State's response to the Ford workers' demands for better wages and conditions.

The jubilation which had greeted the arrival of Henry Ford and his factory had soon turned sour. Wages were lower than expected and many workers had to take second jobs. (*Sunday Telegraph* 14.8.77) After two years, the first contract was due for renegotiation and renewal. The workers at Ford Almusafes were due to see another side of the Ford Motor Company.

Demands

The demands made by the 9000 strong workforce were formulated during a period of political resurgence in Spain. A survey of all the workers was taken, and the demands drawn up were:

1. No victimisation, no sackings
2. 30 days holiday
3. 10,000 pesetas monthly increase
4. 40 hour week (from 42½)
5. Tax and insurance to be paid by Ford
6. Wage reviews every three months
7. Extra payments, three times yearly, of 30 working days each
8. The right to hold workers' meetings in company time
9. Ford to recognise the workers' elected delegates
10. 100% wages for sick pay
11. Improved social conditions: nurseries, cheaper food, family allowance and transport to work.

The company gave a resounding 'no', and suggested among other things, a wage rise in line with the cost of living plus 1%, and a 6% rise in the amount of overtime.

The workers were reinforced by the fact that the whole Valencia region was experiencing a wave of militancy and agitation. In line with all the metal workers in the province, Ford workers began a series of strikes.

Immediately, Ford began to back-pedal. They accepted all the demands except the 10,000 pesetas a month wage increase, offering instead an extra 7,000 pesetas (£62) a month, **but pending consultation** with Ford of Britain. The offer was accepted – it was after all a good deal. Militancy decreased, and the Ford workers became separated from the wave of struggles that continued throughout the Valencia region.

Three days later, when the unrest seemed to have dissipated, Ford came back to the workers at Almusafes. **Ford of Britain, and Ford of Germany had rejected the settlement agreed by Ford of Spain, and so the local management were returning to their original cost-of-living plus 1% offer.**

The answer of the workers was an immediate and unannounced indefinite walk-out strike. Ford retaliated by withdrawing even its original offer, and took on its workers head on. There would be no negotiations until a return to work. Workers delegates addressing a meeting to convey this news and plan the next steps were dragged from the platform by supervisors and Ford security men. The workers drove them off. Then Ford called in the State armed riot police to drive the workers out of the factory. **'Tear gas, smoke bombs and rubber bullets were used by police to try to clear the factory. But barricades were put up and the police were successfully repelled.'** (*Newsline* 19.1.77)

Police Attack

The workers occupied the £800million factory, but not for long. As they left they were attacked by the waiting riot police, and many were injured. A lock out followed. Attempts by groups of workers to re-enter the factory were prevented by armed police.

The action had the full support of the entire workforce, but every attempt by the workers to assemble or meet was prevented or broken up by the riot police. The workers responded by organising 'area assemblies' of workers from the entire area in churches. The *Sunday Times* wrote: **'The (formerly) illegal workers' commissions have demonstrated their increasing power to call workers out in the streets. Churches have day after day been occupied sporadically for strike meetings.'** (16.1.77)

Nationally the government was hastily legitimising the Socialist and Communist parties and their politicians, but in Valencia at least, delegates to the area assemblies were arrested, and many had to go on the run. At the same time Ford began sacking named workers from its factory.

The company was now losing 450 cars and 1000 engines a day. Some parts were being smuggled out to Dagenham, but the shop floor there was already reacting to the rumours of 'blacked' parts. In spite of company intimidation, the workforce remained solid behind their demands.

In desperation, Ford Spain referred the dispute to government arbitration – which has the force of law. Few were surprised when this found in favour of Ford, and offered even less than had already been conceded by the company.

Ford presented this as an ultimatum to the workers. Already Saarlouis and Dagenham were dangerously short of components. 7000 Fiestas had been lost. Yet the workforce showed no sign of giving in, either to the government or to Ford.

In the face of this solid resistance, Ford decided its only escape was to buy off the workers. They conceded the principles of the workers' demands, and offered production workers 8125 pesetas (£69) a month extra.

This was a considerable victory for Ford's Spanish workers: wages before tax rose from approximately £2,200 a year in 1974-76 to £3,000 a year in 1977-79, an increase of 55%. After tax, wages rose from about £1,930 to £2,600. They also won four weeks paid holiday and a month's extra pay a year.

Ford had suffered a set back. But over the next year no less than 20 of the 72 elected worker's delegates at Almusafes were sacked, along with 34 other workers. Significantly, Ford made sure that the 'unorganised' union structure was formalised, and negotiations were routinised.

"If I had a bet" remarked Hanns Brand, the German manufacturing director at Almusafes, "it will be that things will move more in the direction of Germany than of Britain, and finish up somewhere between Germany and France . . . The unions here are mild and reasonable, and I think they'll play a very calm part in the future." (*Sunday Telegraph* 14.8.77)

Fear Eats the Soul

"Everybody wanted to come here. They were coming here from all over Lancashire. You know, expecting the pavements of the Press Shop to be lined with gold." (Halewood worker 1963)

"I left Italy. I had a contract in my pocket that really looked like gold to me. I thought this was going to be the answer to everything. But then, when I arrived in Genk, I was presented with another contract, that was quite different." (Migrant worker, Ford Genk 1969)

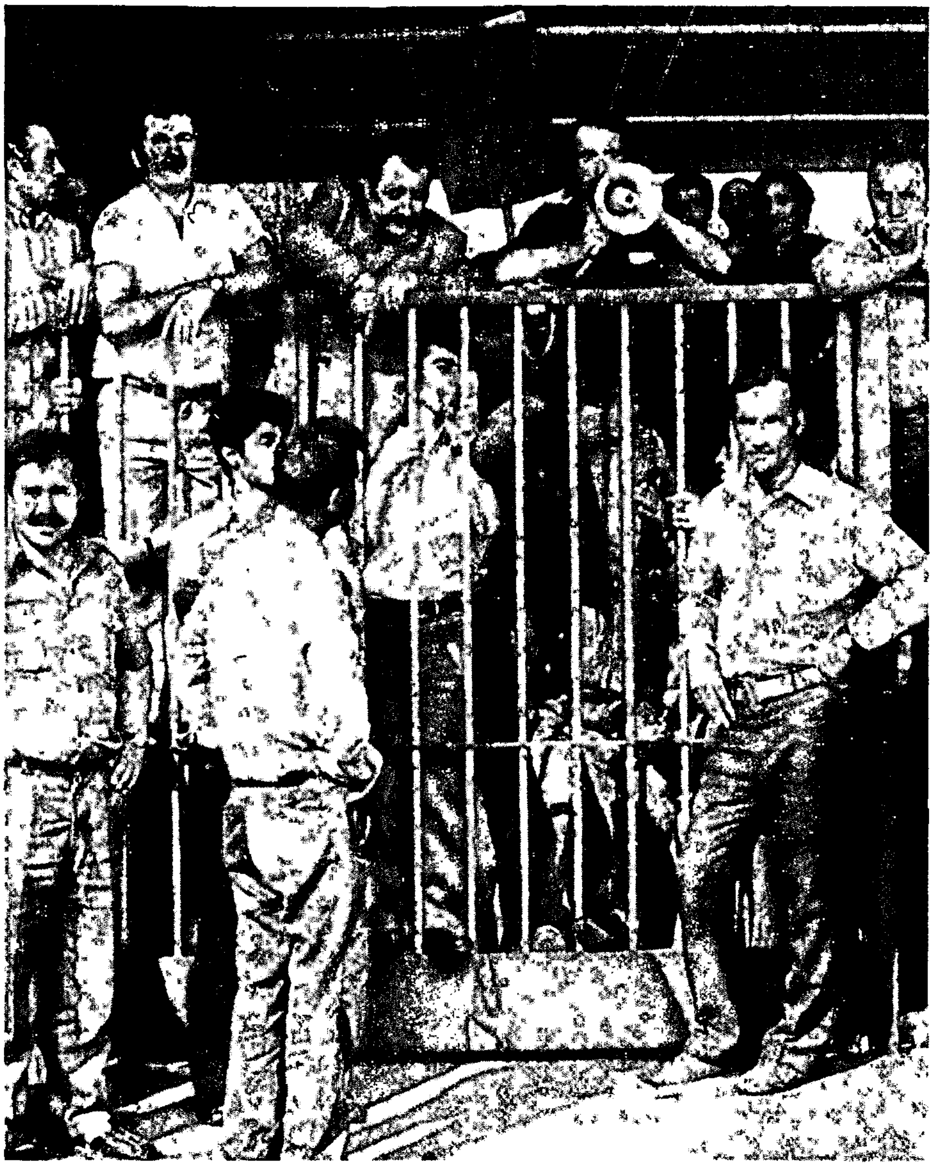
"The Turkish worker at Cologne often lives in Ford barracks, four to a room. They have no private or family life." (German worker, Ford Cologne)

"A major part of the workforce are immigrants. Italians, Greeks, Yugoslavs, Turks and Lebanese are the major groups at Ford. Australia's immigration scheme was started to supply labour for the postwar boom." (Ford worker, Broadmeadows, Melbourne, Australia)

Ford builds its factories virtually on its own terms. Its wages are low, conditions are bad, and car production remains essentially 'casual' labour. The relief at having a job soon fades in the face of the price that has to be paid to Ford.

In order to achieve its ends, Ford needs a surplus of labour outside the plants. If this is not available, then Ford will create it. This 'pool' of workers has a dual purpose. It helps defuse workers' militancy within the factory, and to compensate for the very high rate at which workers walk out.

The worst example of this, and the one over which Ford exerts greatest control, is the use of migrant workers in Europe. This is an extreme manifestation of an employment policy common through-



Cologne 1973. Ford attempted to reduce manning levels by sacking Turks returning from holiday. The subsequent five day strike broadened into a demand for 1DM per hour increase for all workers. But Ford and the German Press successfully campaigned to divide the strikers along national lines. The police helped by attacking a peaceful demonstration.

out Ford – the use of insecure sections of the community to carry out the most unpleasant and onerous parts of car production.

In Germany, France, Belgium and Holland, the bulk of production line work, at least 70-80%, is done by migrant workers – men who have left Turkey, Spain, Morocco and Italy for work in the industrially developed areas.

Approximate numbers of migrant workers in Ford Germany 1976

	Number	*% of workforce*	*% production line*
Cologne	14,600	55	90
Saarlouis	1,800	30	70

(Kommission der Europaischen Gemeinschaften)

Just as Ford's American plants were filled with migrant labour from the Southern States, and Dagenham filled with workers from Ireland in the 1940s and 1950s, so in Europe today, workers are 'imported' by the trainload from the Mediterranean countries.

"They (Ford) go down to Italy and Turkey, where they have a sort of recruiting office. The workers arrive with a contract in their hands. And when they get here they find they're presented with another contract and they're expected to sign. And this contract isn't quite so nice. But there's no choice. We come here so that we can earn enough money to be able to send back home, to support our wives and kids, because there's not enough work there for us." (Italian worker, Genk)

The migrant workers work long and unsocial hours and are encouraged to see their wages in terms of their home economy and not of the host country. They live in hostels, often in barrack conditions.

In the plant they are intimidated. "The reason they're frightened is that they know if they lose their job at Ford, there's such unemployment round these parts that they might never get another job. And what's more if you're an immigrant without a job in Limburg, you have the police on your back all the time." (Migrant worker, Genk)

There are many examples of Ford threatening migrant workers over renewal of their contracts. The most recent was at Ford Amsterdam. Line speeds were such that many production workers became ill. Despite the authenticity of their illness Ford threatened not to renew the contracts of those 'migrants' who stayed home sick too often. (*F.D.* 2.6.76)

The treatment and conditions of immigrant workers in Ford's employment led to a five day strike at the huge Cologne factory in 1973. (See photo caption)

Comparison of production schedules between Ford Britain and Germany shows just what Ford can expect of a workforce based on 'contract labour'.

Plant	*Working days*	*Days on which the schedule was met*
Cologne	224	224
Genk	234	234
Saarlouis	230	230
Dagenham	234	143
Halewood	234	29

(*Ford News* 20.5.77)

'In Dagenham it takes 42 man hours to build a basic two door Cortina. In Belgium it takes 24 man hours to make a similar Taunus.' (*Ford News* June 1975)

The use of migrant contract labour by Ford in Europe pays dividends. 'They are **brought here to work, nothing else. In fact I would say they're imported, because Ford sees them as workers, not as humans but as so much new material for the production lines.**' (Migrant worker, Genk)

General unemployment in the areas of Ford's new factories adds another constraint. 'Fourteen workers chase every job, and more than one in ten of the youth is registered as out of work, in the once prosperous Saar region of West Germany.' (*Newsline* 22.7.77) The Neunkirchen Ironworks is being run down, the Röchling Burbach steelworks intends to reduce its labour force by 1,500. 'By 1980, between 10,000 and 15,000 jobs are to go in Saar steel industry alone.' (*ibid*)

Thirty thousand Saarlanders have already left the area in recent years, and by 1985 the Labour Board estimates that another 85,000 will have to leave.

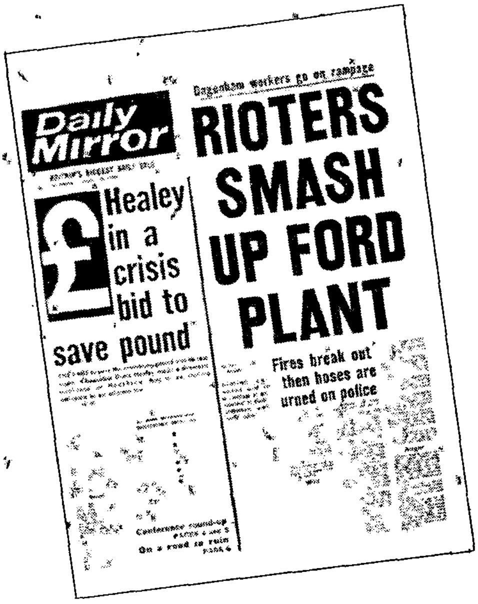
It will surprise no-one to know that Ford is seriously considering taking advantage of this situation to expand its site at Saarlouis.

Casual Labour

One burning issue in Ford factories throughout the world is security of employment and income. Phrased and rephrased in different languages, the demand reoccurs — Guaranteed pay, work or no work.

It is the recessions, when thousands of car workers are made idle, that gain the publicity; but lay-offs are a daily occurrence in the car industry. Whenever they happen, the costs and consequences are borne by the workforce.

Even in the US where the negotiated agreements between Ford and the UAW are the most sophisticated in the world, car workers were put out of work by the company with an ease that was astounding. In a period of 18 months during 1974 and 1975 Ford laid off 46,000 US car workers.



Dagenham workers go on rampage

Daily Mirror

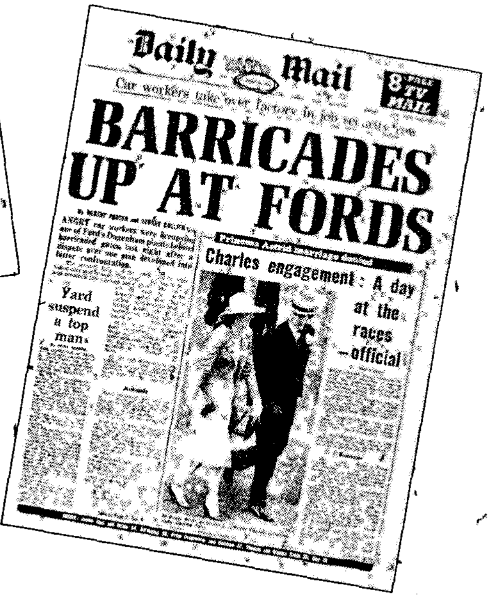
RIOTERS SMASH UP FORD PLANT

Healey in a crisis bid to save pound

Fires break out then hoses are urned on police

Conference round-up

On a road to ruin



Daily Mail

Car workers take over factory in job security row

BARRICADES UP AT FORDS

Yard suspend a top man

Charles engagement: A day at the races —official

As the recession developed around the world, it hit different countries at different times. Between 1973 and 1976 Ford laid off nearly 70,000 workers, put tens of thousands more on short-time working, and thus protected its profits at the expense of its workers' wages.

Lay-off agreements vary enormously throughout Ford's operations. **Where they exist, they serve to under-write the essentially casual nature of the workforce at Ford.** US workers are covered by a 95% guaranteed wage agreement, but the Supplement Fund had run out long before production picked up again and workers were re-employed. Medical and dental insurance ran out too. '**Guys who thought they had made it are now getting a taste of what the poor and the blacks have always had. I'll say this, when the Supplement runs out it won't only be the blacks who'll be picking up a brick to get some food.**' (*Daily Mirror* 28.2.75)

Repatriation

In Europe too, Ford workers suffered. Ford of Germany shed nearly 9000 of its workers between 1974 and 1975. This was done in the context of a national campaign against 'migrant' workers, and most of those who lost their jobs were migrants. Many of these were working under contract, which meant that if they had no job, they had to leave Germany. Ford offered 'golden handshakes' to terminate prematurely many of these contracts, and the workers were then sent back to Turkey. (*NRC* 18.12.74)

Lay-off Pay

The fight against lay-offs, endemic in the car industry, is being led by Ford workers in the UK. Ford's policy of laying off workers without pay if men are made idle by disputes internal to the company has led to a massive build up of resentment against the casual nature of the work. The depth of feeling on this issue has led to more disputes in Ford than any other in recent years.

Ill-informed and out-of-context industrial reporting in the press and television fails to point this out. The car worker is presented as petty minded and work shy. Disputes are portrayed as resulting from the actions of a few bloody minded individuals. Lay-offs are presented as the inevitable result of actions by a selfish few.

Nothing could be further from the truth. The disputes which have received the most publicity have invariably been strikes against the provocative use of lay-offs by management.

Keystone

The day Dagenham workers were pushed too far. September 1976

In July. 1973, just before the summer shut-down, Ford ran out of con-rods as a result of a strike at their sole supplier, Smethwick. Lay-offs would have to be paid by Ford. But then management took a course which Ford workers say is not uncommon. **They provoked a strike within Ford, in this case over Ford drivers' insurance. The whole of Halewood and Dagenham were laid off** ***without*** **pay.**

This action turned the whole issue of lay-offs into a running sore. On August 29th, after the summer holiday, the night shift at Dagenham was laid off for an hour and lost an hour's pay. The following night they announced a lay-off at 11.50pm – too late for many workers to get home. This had happened before, and workers faced the prospect of spending the whole night in the factory with no work and no pay. Anger mounted, windows were smashed and the supervisors blockaded in their office. The night shift was paid.

Anger

The lessons of this experience spread very quickly, and the demand for a guaranteed 8 hours pay emerged. It was very quickly extended to a *guaranteed* 40 hours pay every week *work or no work.* Feelings ran high particularly at Dagenham in the Body Plant and the PTA. (The PTA was, on average, experiencing one unpaid lay-off each week.) The idea also developed that the best way to resist lay-offs was to refuse to leave the plant when a lay-off occurred.

A run of lay-offs in the PTA in September provoked a riot. It followed a meeting in the canteen during a lay-off. This was particularly well attended with many West Indians, who usually boycotted such meetings, turning up. The 'Garage' was still working, and the convenor's refusal to call it to a halt inflamed the workers at the meeting. Most of them went down to the garage. Cars and tools were smashed, car radios were turned on, the doors locked and the keys disposed of. The plant manager's office was then occupied and pictures of company executives torn down and destroyed.

Neither the company nor the unions could control the situation, But leadership and coordination across the plant was weak and Ford was able to split the workers from the Body shop from those in the PTA. A black worker, Winston Williams, from the Body Plant, was sacked. The union officials dropped the guaranteed week demand in favour of reinstatement of Williams, whereas the PTA stuck to its original demands over a guaranteed week. With the two main plants divided, the demand for guaranteed lay-off pay went into procedure, from which it never emerged.

Ford were clearly more reluctant to use lay-offs after the riot.

Rampage

It was the eve of the launching of the new Cortina at Dagenham. The Ford UK unions were negotiating a new contract (nothing on lay off pay) and the £ had collapsed to an all-time low with Chancellor Healey and prime minister Callaghan laying into the Labour Party Conference at Blackpool.

On 29th September 1976, at midnight, the Body Plant were laid off. It was the fifth week running that they had been laid off. Anger turned into a riot. This was how the *Daily Mirror* described it.

"Rioting car workers went on a rampage of destruction at Ford's Dagenham early today. They smashed cars and started fires in the factory. Hundreds of police surrounded the area but the car men locked the gates and bombarded them with a hail of missiles."

Resentment smouldered into 1977. The Engine Plant developed a strategy to fight lay-offs. If any one assembly section was laid off, everyone would go out and picket. In May a dispute over unsafe conditions led to lay-off and this plan being implemented. The picket lasted two days and nights but was eventually undermined by convenors and senior stewards calling a halt.

In the Assembly Plant a different strategy developed. Future lay-offs would be met with total stoppage and occupation, with the action continuing until the Company agreed to pay 80% of the basic pay during the lay-off.

It was this plan that came nearest to forcing Ford's hand over lay off pay. Two thousand Body workers were laid off in June. The Assembly stewards began to implement the previously agreed plan. Pickets were set up on all main gates and a token occupation installed. Incoming supplies were turned back at the gates as drivers refused to cross the picket, and Ford's railway line was ripped up.

The men's convenor Brian Elliot supported the 80% claim and Ford refused to negotiate with him. Union officials were called and the Dagenham Panel of Convenors 'negotiated a new disciplinary code'. A mass meeting was called to present this negotiated deal to the striking workers. It said nothing about lay off pay — the officials were thrown off the platform, and the rank and file took over, voting to continue the strike and reject the 'sell out'.

Workplace Struggles

Within days another meeting was called by the union. This included workers from other sections who had not been directly involved in the dispute. A compromise offer had been worked out by the union and management, allowing 24 hours notice of lay offs. The National Joint Negotiating Committee also committed itself to pursuing 'vigorously' 80% lay off pay in the national pay claim.

The vote was close, but the strike was over. The NJNC pursued the question of lay off pay in the negotiations over the national pay claim. But not vigorously enough. Ford management refused to be moved.

Things have come a long way since Henry Ford's open hostility to trade union organisation in his plants. The Union of Auto Workers (UAW) ex-President Walter Reuther often recalled being cracked over the head and beaten up by Ford's secret police during his attempts to organise the unions inside the Ford plants. The new President Douglas Fraser 'will have no personal memories of UAW's formative struggles, of the rough old days', rejoiced *Automotive News*. 'Perhaps that's all to the good. It seems to us that the auto industry has reached a maturity which demands that the union emphasise diplomacy rather than militancy.' (23.5.77)

Blue Book

The Unions are unlikely to disagree. Outside America, wherever Ford has set up factories, the Company has been able to impose its own structures on the unions. In Britain, the Ford National Joint Negotiating Committee is typical. All matters including pay, conditions, the organisation of work and manning inside Ford plants are decided there. Such is the constitution agreed by the unions, that all issues and grievances arising on the shop floor are ultimately referred to the officers of the NJNC.

The function of the Unions (there are 20 representing Ford workers in the UK) is carefully defined in Ford's 'Blue Book'. This is the handbook of rules and procedure that governs the relationship between the unions and the company. This recognises the unions right 'to exercise their functions' *but* 'within the framework of the Blue Book' (Agreements and Conditions of Employment).

This framework imposes an elaborate procedure on the unions whenver an issue arises; 'At each stage of procedure every attempt will be made to resolve issues raised, and that until procedure has been carried through there will be no stoppage or other unconstitutional action' (*ibid*).

This severely restricts the unions' room for manoeuvre. In the UK, as elsewhere, the unions have chosen to conform to Ford's instruction. This gives the company a decisive advantage. By continually reasserting the 'constitutional' authority of the NJNC, Ford has been able to erode the strength and militancy of organisation on the shop floor itself. It has also been able to twist the arms of the unions, to the point where it is they who are key in controlling shop floor workers. It comes as no surprise to Ford workers to find that some of the most extreme warnings from the unions are reserved not for the company, but for angry and militant workers.

Labour relations in Ford in the 1970s have been dominated by two things. First, Ford's threat to pull out of Britain if the workforce didn't co-operate, and second, the building of an authoritative national negotiating body. For Ford management, these two were not entirely separate.

Ford labour relations man Bob Ramsey spells it out: "We (Ford UK) are a natural choice for expansion. I know for a fact that we could have a very bright future if I could honestly say (to US management) that I have good negotiating institutions." Pointing a finger straight at Jones and Scanlon he went on: "In our dealings at national level, we don't appear to have an authoritative negotiating body." (*Guardian* 6.3.71)

Two major strikes have shaped the union structures within Ford UK today. The first was in 1969, and centred on Halewood. The second, in 1971, is still remembered as the 'parity strike'. Both were ostensibly for more money, but had vastly different consequences.

The 1969 strike was a victory for the shop-floor-based shop stewards movement. The 1971 strike was a victory for the trade union leadership. During the late 1960s shop floor power dominated motor production. By the end of the 1971 Ford strike shop floor militancy had been all but harnessed by the union officials. Admittedly, it was a different quality of official, the old unrepresentative right wingers had been replaced by Hugh Scanlon and Jack Jones. But it was these men who were able to do what several governments had failed to do. (See CIS *Paying for the Crisis* p.41) They checked the growth and power of the stewards movement.

The method was simple. First they publicly supported the shop stewards, and

The National Joint Negotiating Committee

Locked into procedure, the union negotiating team sound militant enough. The minutes of the NJNC meetings between Ford and the unions in no way convey a picture of identity of aims and interests. Points are invariably hotly contested, and the atmosphere is often hostile. Certainly the impression given by Ford management is of concessions being granted only very reluctantly.

The Pay Claims too, apart from the fact that they are becoming increasingly sophisticated, are also couched in the language of confrontation and class politics. The information given and the case made is given weight by the research and analysis provided by Ruskin College Trade Union Research Unit. In the 1977 Claim, even a firm of City stock brokers were commissioned to analyse the company's accounting methods, showing that the accounts understate the true profits position of the Company.

But the battles are set pieces. Procedure, the professionalism of the union officials, the gap between the shop floor and the NJNC is as wide as ever. Only those aspects of rank and file feeling which the union is prepared to deal with get an airing. Even the 1977 Claim, the 'most advanced of its kind', was never put before a mass meeting either before or after it was submitted to the company. No plan of action was laid out to achieve the claim at shop floor level. Shop stewards were not allowed the opportunity to make proposals or amendments, nor to discuss it at a shop stewards conference. The claim remains a reflection of what the union side of Ford National Joint Negotiating Committee consider to be the aspirations of the shop floor.

opened up the union structures to their influence. 'It is the members who must decide,' Jack Jones wrote to the *New Statesman* in 1971. But power would not be allowed to remain with the shop floor. The union would lead. It would be the National Joint Negotiating Committee that would decide, but the shop floor would be represented. Two or three years ago . . . there were no lay members on the negotiating team, the TGWU has two senior lay convenors. The shop stewards are involved in the whole of the process of submitting and agreeing the terms of settlement'. (*op.cit*)

Despite the talk, the agreement with Ford at the end of the 1971 nine week strike reflected none of these high principles. It was a new kind of agreement, to run for two years and with 'no strike' clauses. But the decision on it was not to be made in the traditional way, by show of hands. It was to be ratified by a secret ballot of the Ford workforce.

One worker described the event. 'After nine weeks of strike you read something in the paper, or hear it on the news. Perhaps you go round to your mates. You travel out to the plant. A few placards. 'No ballot – show of hands.' You look round. No one to talk to. 'Ah, fuck it.' Put your cross. Back home.' (Beynon p298)

There are limits to union democracy. This was clearly put by Scanlon at the time of the ballot. 'There comes a time . . . when there are responsibilities on the president of the union that exceed the responsibilities of everyone else' (Beynon p304).

'Ball and Chain'

The Secret ballot followed by the raggedness of the return to work left everyone at Ford confused. This confusion left the lads on the line, and particularly the stewards, vulnerable. It was, Beynon notes, 'a vulnerability that was to prove fatal'. The stewards had been isolated by the 'new revolutionary American style agreement', with its two year contract, its no strike clause, and its reaffirmation of the 'Blue Book' procedure.

Ford management used it to take on the tightly knit stewards organisation. First they announced to the stewards that from now on 'everything would be played by the book'. Stewards were to receive a full work allocation. 'They weren't to be allowed off their jobs without the express permission of the supervisors. "'Either do the job or get off the payroll', became the 'Requirement to Operate'. Day and night local agreement on manning and conditions were ignored. Men were physically prevented from seeing their stewards." (*Socialist Worker* 26.6.71)

Moss Evans of the T&GWU publicly expressed his concern at the deterioration of labour relations in the Ford plants (*Guardian* 17.6.71). But he did nothing. Shop stewards were regularly suspended. In Halewood the attack on the stewards was most overt. The men had been without a wage packet for 20 weeks, and they were unprepared for the confrontation. 'A long strike, a return to a speeded line, walkout after walkout, debts still unpaid and the summer holidays just round the corner. In the second week of June their resolve was put to the test. John Dillon, the steward for the lads on the Magic Roundabout, was sacked.' (Beynon p310)

Ford management had decided to make an 'example' of him, following the refusal of his section to follow procedure. The violent response of the Halewood workers caught both the unions and Ford management by surprise. Dillon was reinstated but his shop steward credentials were not restored. The stewards committee did not feel confident enough to insist. The senior stewards decided to play it cool for a while. As they put it: 'They'd come **within a hairs breadth of destruction'. The 'ball and chain' was lifted. As far as management was concerned a new era had dawned at Ford.**

A leaflet put out by Halewood workers in 1975 headed 'The Sacking of John Dillon' read: 'The Ford bosses and the union had made a deal. John had to be moved away from his section to the Garage, and he would never be steward again. The Wet Deck (his old section) rejected the deal. For months they refused any other steward; but the thing has gone through. In 1972 Ford used the pretext of a sympathy strike in support of a rent demonstration, to break up the Wet Deck, sending 29 men to different sections. Ford have managed to have it their own way for nearly two years.'

The defeat of the shop stewards left the shop floor in Fords plants without a coherent leadership and little direction. Although Ford certainly did not get things all their own way, shop floor militancy lacked unity and the struggle developed haphazardly.

Aftermath

The Spring 1974 Pay Claim was a squalid affair. It was settled with little or no confrontation, within Phase 3 of the Conservative government's Pay Freeze. It left considerable ill-feeling on the shop floor. By September 1974, with the government defeated and the run up to the General Election, the whole issue of pay and conditions was bust right open at Ford with a determined walk out by 1,800 Press Shop workers at Dagenham.

Ford workers felt that the wages gap that had left them the lowest paid car workers in Britain was widening. Bitterness still hung over from the 1971 defeat after a nine week strike for parity. They had got an £8 increase over two years out of that. In 1973 (Phase 2) they got another £2.40 and in the Phase 3 fiasco just £2.60.

In July 1974, when government wage restraint was finally abandoned, the basic wage for day-time line workers at Ford was £38, for a 40-hour week. They didn't have to look far to gauge just how miserable that wage really was. Chrysler workers in Coventry for example, had just settled for a basic rate of £53.57, almost £16 a week more for the same work. Turnover at Fords, always high, became worse than ever. There were also an unprecedented number of disputes originating on the shop floor, that Ford management found they could not handle. Ford workers, unable to improve overall wages by shop floor action, were trying everything to lighten their workload, from simple insubordination to the demand for less work. These skirmishes eventually focused on one issue — the fight against lay-off. For one thing inevitably followed from these disputes. Wherever a dispute originated it led to bottlenecks in production. Ford's solution was to lay workers off without pay. (see Casual Labour)

But for the moment, Ford faced with a major production crisis, were ready by September 1974 to abandon the contract made in the Spring, and reopen negotiations with the union on the question of pay. This effectively deflated the growth of shop floor militancy, and once again placed the union side of the NJNC at the centre of the stage. The men wanted an end to lay-offs without pay, and an interim pay award. They were to get much more than they bargained for.

The daily attack on Ford production by the shop floor had seriously eroded the authority of the unions. They had tacitly supported the Tory wage freeze. This had limited the negotiating arm of the NJNC and shifted the action to the shop floor. The October 1974 interim pay agreement, was designed, among other things, to set right this imbalance, in favour of Ford and the official union negotiating team — the NJNC.

Discipline

Superficially the pay offer was attractive. An additional £7 to £9 gross, with increases in 12 and 18 months. Once again the contract was to run for 2 years. But written into the agreement alongside the money were harsh productivity and manning deals.

Central to the 'new discipline code' was the requirement that workers should be prepared to move around if necessary fro from job to job, and that a pool of 'Utility Men' should be on hand for use where necessary. A huge recruitment campaign (on TV and in the press) followed the agreement. Incoming workers were deliberately placed to break up and recompose whole sections, and shifts. The Press Shop at Dagenham, for instance, which has led the October 1974 strike, found itself with two to three hundred new workers. The unions in the plants co-operated. The informal organisation that had existed before could not survive the turnover, absenteeism, the addition of 'green' labour, and the imposition of procedure supported by union officials. Speed up was inevitable.

Without any coherent shop floor leadership Ford had it all their own way. This also left Ford with exceptionally high stocks of cars. When the expected recession hit Britain in the Spring 1975 the unions were in a strong position to control shop floor resistance to closures and short time working.

Moss Evans was first to speak "Disruptive action will not persuade people to buy cars". The Secretary of the Ford Convenors supported this view: "This is not the time to go off at a tangent. It is a situation when the trade unions have to keep clear heads." (*Evening News* 19.2.75) And from the NJNC came the message "We have already collected over 1,000 signatures . . . and we shall have a meeting with our MPs at the House of Commons."

One fifth of Ford workers were put on short-time. They would get 80% of basic hourly rates during the period they were laid off. But a Ford spokesman added: 'The fund is not inexhaustable'.

Ford's workforce was isolated. Shop steward power in both Dagenham and Halewood had been sapped. The trade union leaders were in close partnership with the Labour Government, more concerned with its survival than the interests of the Ford workers. Union leaders described the situation at Ford as 'unacceptable' but hastened to point out "We've got a good NJNC, and they're right behind us".

Ford's war against the power of shop stewards and militants on the shop floor continues. In June 1977 a particularly strong 'shop' in the Body plant was divided into two. The stewards were confined to one half of the shop only. "They're chasing the stewards around all the time. Every time they go off their jobs to see to an issue they are taken off pay." (Dagenham Ford Workers Group)

Merchants of Death

A lot of changes have been made since Henry Ford I set out in a hired ocean liner full of fellow pacifists to try and stop the first World War. The second World War demonstrated to the carmakers just how profitable the war business is, and they have not looked back since.

Ford's war-time programme produced 8,600 B-24 Liberator bombers, 57,000 aircraft engines and over a quarter of a million jeeps, tanks and other assorted war machines, all in less than three years. Without the war contracts the company might well have collapsed before Henry Ford II could take over. The lesson was not lost, and Ford has become a major contender for the increasingly lucrative contracts emanating from the United States Department of Defence.

The technologies of space research, satellite communications and modern weapon systems are ever more closely related. Government contracts for all these sectors are carried out by the Ford Aerospace and Communications Corporation. This subsidiary also produces radios, air conditioning components and electronic devices for Ford vehicles. Its original name was the Philco-Ford Corporation. This was changed to Aeronutronic Ford Corporation in 1975, and it became the Ford Aerospace and Communications Corporation in December 1976.

In war or in peace military business makes money, but actual hostilities always widen the market. In 1967 *Business Week* ran an article entitled 'What Viet Nam is Teaching Philco', which begins **'The company's contracts with the military for behind-the-lines services such as transport and warehousing are providing experience it hopes to apply in other underdeveloped nations.'**

Starting with a small contract to supply roadbuilders, Philco-Ford built up a $32million a year contract involvement, which included 'conducting a vehicle maintenance service for the whole Da Nang combat command, supplying and operating an Army vehicles parts supply line and warehousing system, stretching from Tacoma, Washington, to Saigon, and keeping the dockside handling equipment in running condition in Viet Nam' (Tricontinental News Service, American Report, December 10th, 1971).

Ex-Ford man Robert McNamara was a great proponent of the electronic battlefield when he was Defence Secretary, and Philco-Ford was a major supplier of sensing and communications systems in South East Asia in the 60s. The first electronic sensing network set up in South East Asia was called the 'McNamara Wall'. Philco had already built aircraft warning and control systems for the Shah of Iran, an 'Integrated Joint Communications System' for Japan, Taiwan and the Philippines, a nationwide telecommunications network for the US Airforce in South Korea, and a global 'secure voice network' for the Pentagon. At the end of 1968 Philco completed installation in Thailand of a $100million communications system specifically designed to meet Thai military demands. Its major use was to perform secret services for the American military, and to function as part of the Pentagon's worldwide defence communications system, run by a combination of specially trained army men and Philco-Ford technicians.

The vice-president of Philco-Ford's Communications and Electronics division, in an interview in *Electronic News*, waxed eloquent on the future business prospects afforded by expected 'fundamental changes in geopolitics and America's strategic policies'. He saw the evolution of new super systems of massive troop transports serviced by a new generation of fast supply ships. And business prospects for Philco-Ford were rosy. 'For those of us in military telecommunications this development means that the traditional lines between strategic and tactical equipment will blur', said the vice-president. 'We can see the need for fixed, strategic trunking networks, which tie our bases together, will diminish. And in their place we will develop transportable telecommunications equipment that may be taken anywhere, anytime, and set up immediately for high capacity communication, via satellites, back to the States.'

As well as electronic warning and 'communications' systems, including a number of 'defense' satellites, Philco-Ford was already working on missiles, among which were the Shillelagh anti-tank missile and the Army's Chaparral air defence missile system. Consolidated defence and space sales in 1967 by the Company and the Philco-Ford subsidiary totalled $429-million, up 14% on the 1966 total. Ford Tractor Operations received government orders for over 38,000 M 151 quarter-ton military trucks during 1967, worth $111million. A further order in early 1968 for production of the Army's M-656 5-ton cargo truck was worth $27million, and was designed by the company's Special Military Vehicles Operations.

Philco-Ford's Educational and Technical Services Division furnished 'logistical support' to the US Navy's activities at Da Nang in South Vietnam at a price of $19million.

All in all, the Vietnam war proved to be a very profitable enterprise for the Ford Motor Company – so much so that they felt it worth while supplying 5,000 civilian technical advisers.

Ford's Defence and Space Sales have grown throughout the 1970s:

	$million
1972	293
1973	369
1974	261
1975	389
1976	431

In 1974 Ford received a $96million contract to build the worldwide network of ground terminals for the US Department of Defence's second generation defence satellite communications system. In 1975 Aeronutronic Ford announced that it was developing a new guidance system employing laser beams for air defence systems, as well as continuing to produce guidance and control systems for Sidewinder air to air missiles.

By now Ford was the biggest producer of communications satellites in the world. In 1976 it announced that it had now built a total of 39 Earth satellites, had installed 54 major satellite earth stations, and over 800 ground communications terminals worldwide. The strategic advantages of these should not be overlooked. Ten years earlier the vice-president of Philco-Ford's Communications and Electronics Division had said that he viewed earth terminals for satellites as 'bridgeheads for development of modern telecommunications in more backward sections of the world'.

The 1976 Report and Accounts spelled out the increasing importance of the overseas arms market: 'The subsidiary also produces certain defence products for the United States and other governments. The products include tactical and air-defence missile systems. Some of the sales are made directly to the US government which, in turn sells some of the products to foreign governments. Ford's military sales made directly to foreign governments are controlled by licenses from the US Department of State.'

In 1976 it became possible to obtain information publicly for the first time about companies applying for licenses under the Foreign Military Sales Act. There are 22 categories on the US Munitions list, and companies apply for licenses by category. Companies may, but do not necessarily in any given year, export items in those categories. In 1975 Ford filed its application for a five-year registration. The application included a list of Ford's munitions list manufactures and/or exports:

Category I – Firearms and Components
Category II – Guns over Caliber .50
Category III – Ammunition Components and Parts
Category IV – Launch Vehicles, Guided Missiles, Ballistic Missiles and Rockets and Components for above
Category VI – Gun and Gun Sight Mounts and Missile Systems for Vessels of War and Other Special Naval Equipment
Category VII – Tanks and Military Vehicles and Specifically Designed Components
Category VIII – Aircraft, Spacecraft and Associated Equipment
Category IX – Military Training Equipment
Category X – Military Body Armour
Category XI – Military and Space Electronics
Category XII – Fire Control, Range Finder, Guidance and Control Equipment
Category XIII – Auxiliary Military Equipment, Including Space Cameras, Speech Scramblers and Cryptographic Devices and Components, and Armour Plate
Category XVIII – Technical Data

The Council on Economic Priorities, an American organisation which publishes detailed information on the practices of US corporations, printed a list of the US Defence Department's top 100 contractors in its August 1977 newsletter.

Ford Arms Sales to US Government

year	*Rank (in top 100)*	*Contracts (mil $)*	*% of sales*
1972	28	196.5	1.0
1973	26	213.9	0.9
1974	32	174.8	0.7
1975	27	259.7	1.1
1976	27	285.4	1.0

'As the Carter Administration takes office on January 20, the Pentagon's weapons buyers will be setting out on their biggest shopping spree in nearly a decade. Their pockets are jingling with more cash than they have seen since 1970 . . . ! (*Business Week* 10.1.77)

'One reason for this 'very good news for the nation's defence industry' *Business Week* reported, is that Defence Department outlays for procurement are rising both in constant dollars and in percentage of gross national product – and can be expected to continue rising into the 1980s. Another reason is that new Pentagon procurement policies are reducing the risk for contractors and improving profits by allowing companies to charge the government for the cost of money used to buy or lease plant and equipment' (National Action/Research on the Military Industrial Complex).

The Ford Motor Company makes large amounts of money from armaments and at the same time strengthens that interdependence between corporation and state which is a growing feature of multinational development. The scope for profiteering in the arms trade is enormous, especially with the willing partnership of the Pentagon, which is eager to sell Congress bigger and better weapons systems. No-one seems to question the huge price-hikes which accompany this trade. The Sidewinder missile, for instance, has increased in price by 99% between 1975 and 1976, from $23,375 to $46,450. None of the market considerations and price constraints that exist in the auto trade have any relevance in the weapons trade. No market capacity, no import threats, no styling headaches, no emission controls, no energy policy constraints – and a truly captive market. The taxpayer keeps on paying. And best of all, if the product kills someone – the contract is probably increased.

The Cost of Dying

Ever wonder what your life is worth in dollars? Ford has it all worked out: $200,000

"Nobody's making a consumer buy anything. He buys of his own free will. Now, if we build a lousy car, he is getting screwed. And we build lots of lousy cars, no question about it; can't deny that." (Henry Ford, April 17, 1977)

In 1955, Robert McNamara, head of the Ford Division, devised a sales strategy based on safety features introduced into that year's models. General Motors didn't like that at all. The Ford advertisements conveyed the undiluted message that when their cars were involved in crashes, the new safety features would diminish the owners' injuries – and would do so more effectively than their competitors' cars.

Safety Doesn't Sell

"At GM, cars were promoted as dream boats in order to sell more cars for shorter holding periods. Ford was taking the romance out of cars, injecting collisions and casualties and other unpleasantness into the motorists' decision about which car to purchase. Should this continue, GM saw the joy going out of owning an automobile, with the fear of crashes replacing the hope of psychosexual gratification which *their* ads projected.

". . . GM executives flipped and came down hard on McNamara. He not only was promoting safety to bolster the sagging sales of a model year that had little else to offer, he appeared to be genuinely interested in safety.

"The number-one auto giant was not without friends at high Ford Motor Company levels. Ford's chairman of the board, Ernest Breech, was formerly GM's chief financial officer; Dale Harder, Ford's head of manufacturing, had had a similar position in General Motors; and Louis Crusoe, executive vice president of the car division, was formerly with the Cadillac division of General Motors. These gentlemen understood the market power of General Motors. The only slightly exaggerated saying at Ford at that time was that Chevy (Chevrolet division) could drop its price $25 to bankrupt Chrysler and $50 to bankrupt Ford. GM said stop and Ford literally screeched to a halt, with the aforementioned ex-GM Ford executives getting McNamara to switch gears to an advertising campaign that emphasized styling and performance rather than safety.

". . . The auto industry's most effective myth began to grow. 'Ford sold safety while Chevy sold cars,' cracked the Detroit iron masters during the next decade when safety advocates urged the auto manufacturers towards more crashworthy vehicles." (Nader, Unsafe at Any Speed, Second edition).

In September 1977, *Mother Jones,* an American consumer magazine, exposed the horrific example of the irreconcilable conflict between profits and human life. "Although this particular story is about the Pinto, the way in which Ford made its decision is typical of the US auto industry generally. There are plenty of similar stories about other cars made by other companies."

Here we reprint a slightly shortened version:

"By conservative estimates Pinto crashes have caused 500 burn deaths to people who would not have been seriously injured if the car had not burst into flames. The figure could be as high as 900. Burning Pintos have become such an embarrassment to Ford that its advertising agency, J. Walter Thompson, dropped a line from the end of a radio spot that read "Pinto leaves you with that warm feeling."

Firetrap

Ford knows the Pinto is a firetrap, yet it had paid out millions to settle damage suits out of court, and it is prepared to spend millions more lobbying against safety standards. With a half million cars rolling off the assembly lines each year, Pinto is the biggest-selling subcompact in America, and the company's operating profit on the car is fantastic. Finally, in 1977, new Pinto models have incorporated a few minor alterations necessary to meet that federal standard Ford managed to hold off for eight years. Why did the company delay so long in making these minimal, inexpensive improvements?

Ford waited eight years because its internal "cost-benefit analysis", **which places a dollar value on human life,** said it wasn't profitable to make the changes sooner.

Mother Jones has studied hundreds of reports and documents on rear-end collisions involving Pintos. These reports conclusively reveal that if you ran into a Pinto you were following at over 30 miles per. hour, the rear end of the car would buckle like an accordion, right up to the back seat. The tube leading to the gas-tank cap would be ripped away from the tank itself, and gas would immediately begin sloshing onto the road around the car. The buckled gas tank would be jammed up against the differential housing (that big bulge in the middle of your rear axle), which contains four sharp, protruding bolts likely to gash holes in the tank and spill still more gas. Now all you need is a spark from a cigarette, ignition, or scraping metal, and both cars would be engulfed in flames. If you gave that Pinto a really good whack – say at 40mph – chances are excellent that its doors would jam and you would have to stand by and watch its trapped passengers burn to death.

Lies

This scenario is no news to Ford. Internal company documents, in our possession show that Ford has crash-tested the Pinto at a top-secret site more than 40 times and that *every* test made at over 25mph without special structural alteration of the car has resulted in a ruptured fuel tank. Despite this, Ford officials denied under oath having crash-tested the Pinto.

Eleven of these tests, averaging a 31mph impact speed, came before Pintos started rolling out of the factories. Only three cars passed the test with unbroken fuel tanks. In one of them an inexpensive light-weight, plastic baffle was placed between the front of the gas tank and the differential housing, so those four bolts would not perforate the tank. In another successful test, a piece of steel was placed between the tank and the bumper. In the third test car the gas tank was lined with a rubber bladder. But none of these protective alterations was used in the mass-produced Pinto.

Why was a car known to be a serious fire hazard deliberately released to production in August of 1970?

Like the Mustang, the Pinto became known in the company as "Lee's car". Lee Iacocca wanted that little car in the showrooms of America with the 1971 models. So he ordered his engineering vice president, Bob Alexander, to oversee what was probably the shortest production planning period in modern automotive history. The normal time span from conception to production of a new car model is about 43 months. The Pinto schedule was set at just under 25.

Design, styling, product planning, advance engineering and quality assurance all have flexible time frames, and engineers can pretty much carry these on simultaneously. Tooling, on the other hand, has a fixed time frame of about 18 months. Normally, an auto company doesn't begin tooling until the other processes are almost over. **But Iacocca's speed-up meant Pinto tooling went on at the same time as product development.** So when crash tests revealed a serious defect in the gas tank, it was too late. The tooling was well under way.

When it was discovered the gas tank was unsafe, did anyone go to Iacocca and tell him? "Hell no," replied an engineer who worked on the Pinto, a high company official for many years, who, unlike several others at Ford, maintains a necessarily clandestine concern for safety. "That person would have been fired. Safety wasn't a popular subject around Ford in those days. With Lee it was taboo."

Heightening the anti-safety pressure on Pinto engineers was an important goal set by Iacocca known as "the limits of 2,000". The Pinto was not to weigh an ounce over 2,000 pounds and not to cost a cent over $2,000. "Iacocca enforced these limits with an iron hand," recalls the engineer quoted earlier. So, even when a crash test showed that that one-pound, one-dollar piece of plastic stopped the puncture of the gas tank, it was thrown out as extra cost and extra weight.

As Lee Iacocca was fond of saying, "Safety doesn't sell."

Blame for all the injuries and deaths in Pintos since 1970 does not rest on the shoulders of Lee Iacocca alone. For, while he and his associates fought their battle against a safer Pinto in Dearborn, a larger war against safer cars raged in Washington.

One skirmish in that war involved Ford's successful, eight-year lobbying effort against Federal Motor Vehicle Safety Standard 301, the rear-end provisions of which would have forced Ford to redesign the Pinto.

Bulldog Henry

During the early 1960s, auto safety legislation became the *bete-noire* of American big business. The auto industry was the last great unregulated business, and if *it* couldn't reverse the tide of government regulation, the reasoning went, no one could.

People who know him cannot remember Henry Ford II taking a stronger stand than the one he took against the regulation of safety design.

By 1965, most pundits and lobbyists saw the handwriting on the wall and prepared to accept government "meddling" in the last bastion of free enterprise. Not Henry. With bulldog tenacity, he held out for defeat of the legislation to the very end, loyal to his grandfather's invention and to the company that makes it. But the Safety Act passed the House of Senate unanimously, and was signed into law by Lyndon Johnson in 1966.

While lobbying for and against legislation is pretty much a process of high-level back-slapping, press-conferencing and speech-making, fighting a regulatory agency is a much subtler matter. Henry headed home to lick his wounds in Grosse Pointe, Michigan, and a planeload of the Ford Motor Company's best brains flew to Washington to start the "education" of the new federal auto safety bureaucrats.

Price of a Life

Their job was to implant the official industry ideology in the minds of the new officials regulating auto safety. Briefly summarized, that ideology states that auto accidents are caused not by *cars,* but by 1) people and 2) highway conditions.

Before the Ford experts left Washington to return to drafting tables in Dearborn they did one other thing. They managed to informally reach an agreement with the major public servants who would be making auto safety decisions. This agreement was that "cost-benefit" would be an acceptable mode of analysis by Detroit and its new regulators. And, as we shall see, cost-benefit analysis quickly became the basis of Ford's argument **against** safer car design.

Ever wonder what your life is worth in dollars? Perhaps $10 million? Ford has a better idea: $200,000.

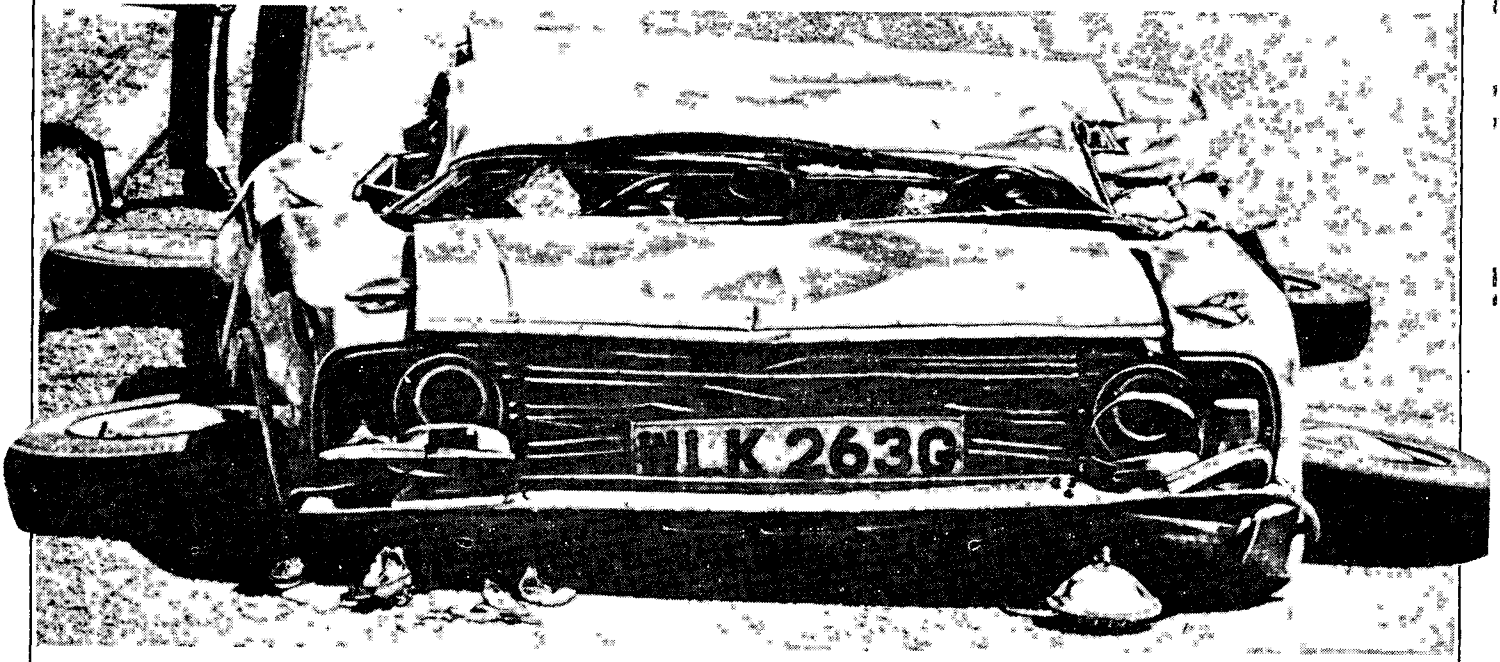
Remember, Ford had gotten the federal regulators to agree to talk auto safety in terms of cost-benefit analysis. But in order to be able to argue that various safety costs were greater than their benefits, Ford needed to have a dollar value figure for the "benefit". Rather than be so uncouth as to come up with such a price tag itself, the auto industry pressured the National Highway Traffic Safety Administration to do so. And in a 1972 report the agency decided a human life was worth $200,725. Inflationary forces have recently pushed the figure up to $278,000.

$11 Too Dear

Furnished with this useful tool, Ford immediately went to work using it to prove why various safety improvements were too expensive to make.

Nowhere did the company argue harder that it should make no changes than in the area of rupture-prone fuel tanks. Not long after the government arrived at the $200,725-per-life figure, it surfaced, rounded off to a cleaner $200,000, in an internal Ford memorandum. This cost-benefit analysis argued that Ford should not make an $11-per-car improvement that would prevent 180 fiery deaths a year.

All Ford had to do was convince men like



John Volpe, Claude Brinegar and William Coleman (successive Secretaries of Transportation during the Nixon-Ford years) that certain safety standards would add so much to the price of cars that fewer people would buy them. This could damage the auto industry, which was still believed to be the bulwark of the American economy. "Compliance to these standards," Henry Ford II prophesied at more than one press conference, "will shut down the industry."

So when J.C. Echold, Director of Automotive Safety (which means chief anti-safety lobbyist) for Ford wrote to the Department of Transportation – which he still does frequently, at great length – he felt secure attaching a memorandum that in effect says it is acceptable to kill 180 people and burn another 180 every year, **even though we have the technology that could save their lives for $11 a car.**

There are several main techniques in the art of combating a government safety standard: a) make your arguments in succession, so the feds can be working on disproving only one at a time; b) claim that the real problem is not X but Y (we already saw one instance of this in "the problem is not cars but people"); c) no matter how ridiculous each argument is, accompany it with thousands of pages of highly technical assertions it will take the government months or, preferably, years to test. Ford's large and active Washington office brought these techniques to new heights and became the envy of the lobbyists' trade.

Fiery Death

The Ford people started arguing against Standard 301 way back in 1968 with a strong attack of technique b). Fire, they said, was not the real problem. Sure, cars catch fire and people burn occasionally. But statistically auto fires are such a minor problem that NHTSA should really concern itself with other matters.

Strange as it may seem, the Department of Transportation (NHTSA's parent agency) didn't know whether or not this was true. So it contracted with several independent research groups to study auto fires. The studies took months, which was just what Ford wanted.

The completed studies, however, showed auto fires to be more of a problem than Transportation officials ever dreamed of. Robert Nathan and Associates, a Washington research firm, found that 400,000 cars were burning up every year, burning more than 3,000 people to death. Furthermore, auto fires were increasing five times as fast as building fires. Another study showed that 35 per cent of all fire deaths in the US occurred in automobiles.

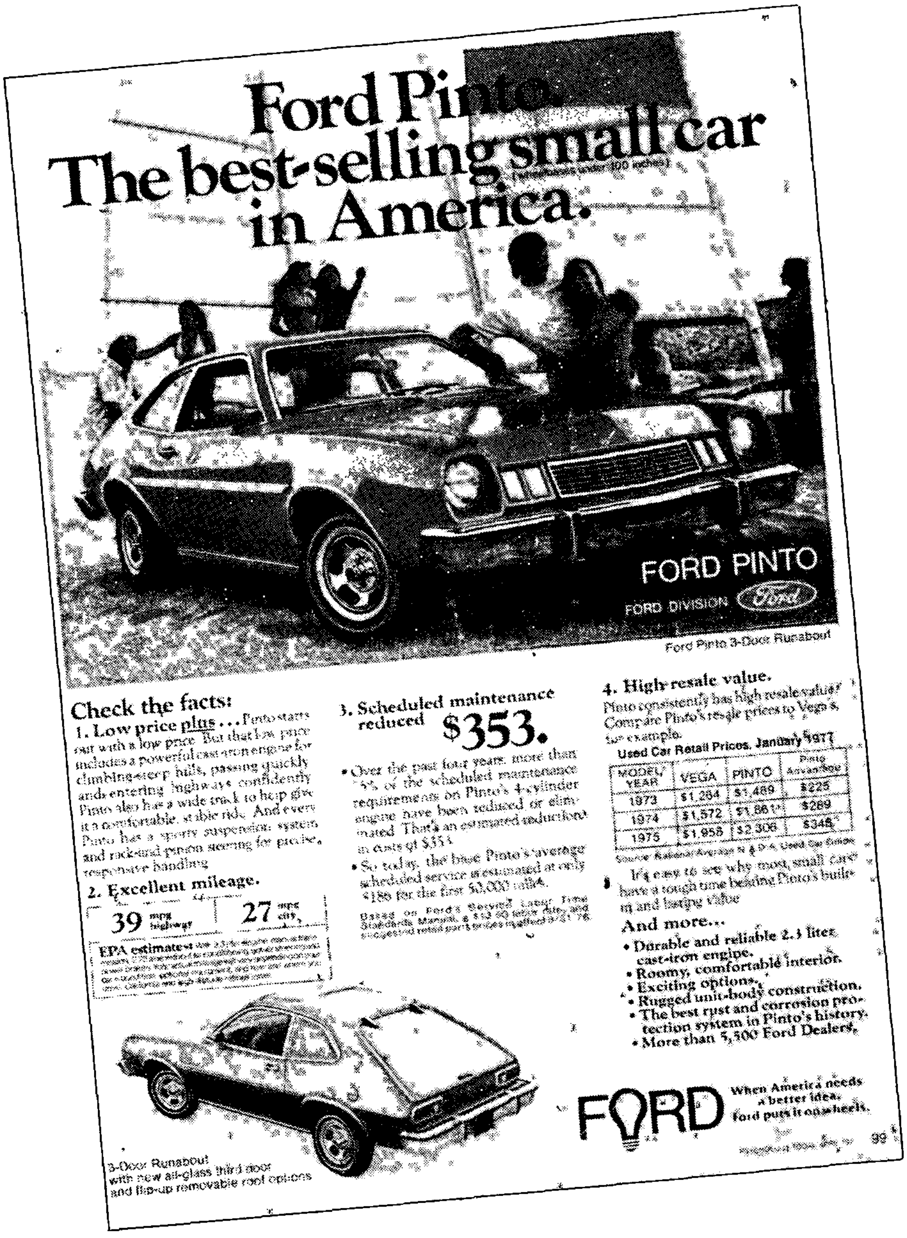
Another study was done by the Highway Traffic Research Institute in Ann Arbor, Michigan, a safety think-tank funded primarily by the auto industry (the give-away there is the words "highway traffic" rather than "automobile" in the group's name). It concluded that 40% of the lives lost in fuel-fed fires could be saved if the manufacturers complied with proposed Standard 301. Finally, a third report was prepared for NHTSA by consultant Eugene Trisko entitled "A National Survey of Motor Vehicle Fires". His report indicates that the Ford Motor Company makes 24% of the cars on the American road, yet these cars account for 42% of the collision-ruptured fuel tanks.

Ford lobbyists then used technique a) – bringing up a new argument. Their line then became; yes, perhaps burn accidents do happen, but rear-end collisions are relatively rare (note the echo of technique b) here as well). Thus Standard 301 was not needed. This set the NHTSA off on a new round of analyzing accident reports. The government's findings finally were that rear-end collisions were seven and a half times more likely to result in fuel spills than were front-end collissions. So much for that argument.

Thousands Burn

By now it was 1972; NHTSA had been researching and analyzing for four years to answer Ford's objections. During that time, nearly 9,000 people burned to death in flaming wrecks. Tens of thousands more were badly burned and scarred for life. And the four-year delay meant that well over 10million new unsafe vehicles went on the road, vehicles that will be crashing, leaking fuel and incinerating people well into the 1980s.

Ford now had to enter its third round of battling the new regulations. On the "the problem is not X but Y" principle, the company had to look around for something new to get itself off the hook. One might have thought that, faced with all the latest statistics on the horrifying number of deaths in flaming accidents, Ford would find the task difficult. But the company's rhetoric was brilliant. The problem was not burns, but . . . impact! Most of the people killed in these fiery accidents, claimed Ford, would have


Ford Pinto.
The best-selling small car in America.
FORD PINTO
FORD DIVISION
Ford
Ford Pinto 3-Door Runabout
FORD
When America needs a better idea, Ford puts it on wheels.

Check the facts:

1. Low price plus... Pinto starts out with a low price. But that low price includes a powerful cast-iron engine for climbing steep hills, passing quickly and entering highways confidently. Pinto also has a wide track to help give it a comfortable, stable ride. And every Pinto has a sporty suspension system and rack-and-pinion steering for precise, responsive handling.

2. Excellent mileage.

39 mpg highway | 27 mpg city

EPA estimates

3. Scheduled maintenance reduced $353.

- Over the past four years, more than 75% of the scheduled maintenance requirements on Pinto's 4-cylinder engine have been reduced or eliminated. That's an estimated reduction in costs of $353.
- So today, the base Pinto's average scheduled service is estimated at only $180 for the first 50,000 miles.

4. High resale value.

Pinto consistently has high resale value. Compare Pinto's resale prices to Vega's, for example.

Used Car Retail Prices, January 1977

MODEL YEAR	VEGA	PINTO	Pinto Advantage
1973	$1,264	$1,489	$225
1974	$1,572	$1,861	$289
1975	$1,958	$2,306	$348

It's easy to see why most small cars have a tough time beating Pinto's built-in and lasting value.

And more...

- Durable and reliable 2.3 liter cast-iron engine.
- Roomy, comfortable interior.
- Exciting options.
- Rugged unit-body construction.
- The best rust and corrosion protection system in Pinto's history.
- More than 5,500 Ford Dealers.

3-Door Runabout with new all-glass third door and flip-up removable roof options

died whether the car burned or not. They were killed by the kinetic force of the impact, not the fire.

And so once again, as in some giant underwater tennis game, the ball bounced into the government's court and the absurdly pro-industry NHTSA began another slow-motion response. Once again it began a time-consuming round of test crashes and embarked on a study of accidents. The latter, however, revealed that a large and growing number of corpses taken from burned cars involved in rear-end crashes contained no cuts, bruises or broken bones. They clearly would have survived the accident unharmed if the cars had not caught fire. This pattern was confirmed in careful rear-end crash tests performed by the Insurance Institute for Highway Safety. A University of Miami study found an inordinate number of Pintos burning on rear-end impact and concluded that this demonstrated "a clear and present hazard to all Pinto owners".

Delays

Pressure on NHTSA from Ralph Nader and consumer groups began mounting. The industry-agency collusion was so obvious that Senator Joseph Montoya (D-NM) introduced legislation about Standard 301. NHTSA waffled some more and again announced its intentions to promulgate a rear-end collision standard.

Waiting, as it normally does, until the last day allowed for response, Ford filed with NHTSA a gargantuan batch of letters, studies and charts now arguing that the federal testing criteria were unfair. Ford also argued that design changes required to meet the standard would take 43 months, which seemed like a rather long time in light of the fact that the entire Pinto was designed in about two years.

Some of these complaints were accepted, others rejected. But they all required examination and testing by a weak-kneed NHTSA, meaning more of those 18-month studies the industry loves so much. So the complaints served their real purpose – delay; all told, an eight-year delay, while Ford manufactured more than three million profitable, dangerously incendiary Pintos. To justify this delay, Henry Ford II called more press conferences to predict the demise of American civilization. "If we can't meet the standards when they are published," he warned, "we will have to close down. And if we have to close down some production because we don't meet standards we're in for real trouble in this country."

Out of Court

When the Pinto liability suits began, Ford strategy was to go to a jury. Confident it could hide the Pinto crash tests, Ford thought that juries of solid American registered voters would buy the industry doctrine that drivers, not cars, cause accidents. It didn't work. It seems that juries are much quicker to see the truth than bureaucracies, a fact that gives one confidence in democracy. Juries began ruling against the company, granting million-dollar awards to plaintiffs.

"We'll never go to a jury again," says Al Slechter in Ford's Washington office. "Not in a fire case. Juries are just too sentimental. They see those charred remains and forget the evidence. No sir, we'll settle."

Settlement involves less cash, smaller legal fees and less publicity, but it is an indication of the weakness of their case. Nevertheless, Ford has been settling when it is clear that the company can't pin the blame on the driver of the other car.

Until recently, it was clear that, whatever the cost of these settlements, it was not enough to seriously cut into the

Pinto's enormous profits. The cost of retooling Pinto assembly lines and of equipping each car with a safety gadget like that $5.08 Goodyear bladder was, company accounts calculated, greater than that of paying out millions to survivors like Robbie Carlton or to widows and widowers of victims like Sandra Gillespie. The bottom line ruled, and inflammable Pintos kept rolling out of the factories.

In 1977, however, an incredibly sluggish government had at last instituted Standard 301. Now Pintos will have to have rupture-proof gas tanks. Or will they?

To everyone's surprise, the 1977 Pinto recently passed a rear-end crash test in Phoenix, Arizona, for NHTSA. The agency was so convinced the Pinto would fail that it was the first car tested. Amazingly, it did not burst into flame,

"We have had so many Ford failures in the past," explained agency engineer Tom Grubbs, "I felt sure the Pinto would fail."

How Did it Pass

Remember that one-dollar, one-pound plastic baffle that was on one of the three modified Pintos that passed the pre-production crash tests nearly ten years ago? Well, it is a standard feature on the 1977 Pinto. In the Phoenix test it protected the gas tank from being perforated by those four bolts on the differential housing.

We asked Grubbs if he noticed any other substantial alterations in the rear-end structure of the car. "No," he replied, "the [plastic baffle] seems to be the only noticeable change over the 1976 model."

But was it? What Tom Grubbs and the Department of Transportation didn't know when they tested the car was that it was manufactured in St Thomas, Ontario. Ontario? The significance of that becomes clear when you learn that Canada has for years had extremely strict rear-end collision standards.

Whether the new American Pinto fails or passes the test, Standard 301 will never force the company to test or recall the more than two million pre-1977 Pintos still on the highway. Seventy or more people will burn to death in those cars every year for many years to come."

A tiny item in *Automotive News* on August 22nd 1977 reported that Ford Motor is recalling 642 1977 Pinto models for inspection of two nuts in the rear bumper assembly. "Incorrect nuts may have been used. Because of their mounting position, they could cut the fuel tank in a rear-end collision, Ford said."

A fortnight later the same paper featured Ford's "refutation" of the *Mother Jones* article. The main item appears to be Ford's declaration that "there is no proof to substantiate these claims", although there are also masses of statistics designed to show "that the Pinto is free of the safety-related defects ascribed to it by *Mother Jones*". No specific evidence is given to counter the article.

Since the passage of the Motor Vehicle Safety Act in 1966, there have been more than 50 million cars recalled in almost 2000 recall campaigns. Ford itself recalled 1.3million vehicles in 42 separate campaigns in the United States, and 657,000 vehicles in 23 campaigns in Europe – all in the one year 1976. Given how hard the company fights to avoid recalls, the true extent of profitable but lethal car-building remains hidden.

The Airbag Fix

Airbags, which inflate instantaneously inside a car if that car hits anything are potentially the greatest life saver yet devised.

However, according to Ford, airbags will add anywhere from $100 to $400 to the cost of every auto. The company argues, probably correctly, that the auto buyers would prefer to pay less and take their chances. But, the vehemently anti-airbag Ford wasn't willing to take its chances with the Department of Transportation even when it was loaded with pro-auto Republicans. So Ford introduced a crafty little system called the ignition interlock. The ignition interlock will not allow a driver to start the car until the front seat passengers are buckled up. The ignition interlock was a sensible compromise. The rationale was that if drivers were forced to use seat belts there would be no need for airbags, which is true enough. In late 1970, Henry Ford II sold Chrysler president Lynn Townsend on the idea and convinced him they could sell it together in Washington.

A Nixon aide set up a meeting between Ford, Chrysler's Townsend and Nixon to discuss "matters related to the automotive industry".

A few days after the meeting, John Ehrlichman called a meeting with Transportation Secretary John Volpe. After the meeting Volpe was heard to remark "The airbag's in trouble." Soon after, Henry Ford II contributed nearly $50,000 towards Nixon's re-election campaign.

After many of the delays that auto-makers love, on August 15, 1973, Department of Transportation officials finally issued a new regulation requiring ignition interlocks on all new cars. There was now no need for airbags, so they dropped from the picture. During this two-year delay, however, Congress member Louis Wyman (R-NH) was preparing an amendment to the Motor Vehicle and School Bus Safety Act of 1974, which said, "Federal safety standards may not require that any vehicles be equipped with a safety-belt interlock system." Some Hill staffers say Ford actually wrote the amendment. With a well-timed push from auto lobbyists, the amendment passed. The airbag *and* the ignition interlock were now both dead, victims of one of the most brilliantly executed double fixes in the history of lobbying.

Now that airbags are back on the agenda again, keep your eye on Ford.

Ford and the Third World

Ford's intervention in the Third World, far from transforming economies by utilising potential for development, exploits and reinforces existing situations for its own profit.

Ford, like other multinational companies, has to continually seek new markets and develop old ones. By the mid-sixties, the American market was no longer a growth area for motor manufacturers, and the US motor industry turned its attention to the development of markets in Europe and the Third World.

Ford has operations in numerous countries of South East Asia: South Korea; Taiwan; Thailand; Malaysia; Singapore; Indonesia; and the Philippines. These operations are controlled from Ford in Australia, and are closely tied in with the supply of components to the Australian and New Zealand factories. In Latin America, the company has manufacturing capacity in Mexico, Brazil, Venezuela, Uruguay, and Argentina.

Ford was already established in these areas, having manufactured in Latin America, for instance, since the 1920s. However, in the 1960s it was facing increasing competition from relatively new Japanese competitors, and the expanding European multinationals. Ford needed to develop its production in the Third World, and take maximum economic advantage of very small national markets. The Philippines, for example, when Ford opened a plant in 1967, accounted for just 0.24 per cent of the world market.

The key to Ford's strategy is complementation. This is a plan for each country in a region to specialise in the production of particular components, and then by exchanging them assemble a complete car in various countries. These imports would be treated as local products, and the theory is that each country exports as much as it imports. **"To those of us at Ford, it is a fancy word for inter-regional free trade in motor vehicles and components."** (Henry Ford II) The company gains by avoiding duplication of tooling costs, and achieving lower unit costs via higher volume production.

Ford faced, however, other problems besides the small size and diverse nature of the car markets in the Third World. During the 1950s and early 1960s, most Third World countries were attempting to build industries that would produce goods for the domestic market and lessen imports, helping to solve the chronic deficit in their balance of payments. Though the details varied from country to country, in general the developing nations tried to create these import substitution industries, protecting them behind high tariff barriers, and strictly controlling the use of foreign exchange.

The First National City Bank of Manila describes the effects of typical measures in the Philippines between 1950 and 1962. 'The exchange control system set in motion a radical alteration of the country's economic structure. Stimulated by an effective barrier against foreign products and by preferential access to foreign exchange . . . an entire spectrum of new or expanded local industries came into existence.'

IMF Rules OK?

The multinational companies could get round the tariff barriers by establishing manufacturing or assembly plants within the country, but they could not get around the government control of foreign exchange. The expansion of their operations was limited to a certain extent, and more importantly, their ability to repatriate profits was severely curtailed. Also, the tariffs prevented the multinationals from expanding production and rationalising it for a larger regional market, thus gaining economies of scale. For the multinationals to organise the Third World countries into production bases, and integrate individual countries into regional markets for their output, the restrictions on free trade had to be cleared away.

This did not take long. The policies of import substitution, though developing local industry, could not solve the balance of payments problem. The expansion of industry served to increase imports of industrial materials and semi-finished products to be fed into local industries, and eventually imports began to exceed the value saved by domestic production. In the mid-1960s a wave of growing trade deficits spread around the Third World.

At this time, a number of international agencies began the process of remoulding the Third World's trade policies. The International Monetary Fund, the last resort of Third World governments needing loans to finance trade deficits, opposed exchange controls and restrictions on the flow of capital with increasing firmness. Loans were made conditional on the dismantling of tariffs and foreign exchange regulations.

Cuaderno, governor of the Philippines Central Bank, describes an application for a loan made in 1958, needed to meet a deficit in the balance of payments. As part of the stabilisation plan he put before the IMF, a 25% tax on the sale of foreign currency was proposed. The IMF however was determined that the loan would be conditional on the removal of *all* foreign exchange controls, and a devaluation of the Peso. Cuaderno comments: 'We had a feeling that this was what the US government officials would like us to do.' On that occasion the pressure was resisted; but later on this was not possible.

As well as pressure from the IMF on currency controls, organisations like the World Bank, the Inter American Development Bank and the Agency for International Development were busy promoting regional trade areas based on the European Common Market. In 1960 the Latin American Free Trade Association was founded, and in 1966 the Association of South East Asian Nations was formed. The theory behind such trade areas was that as tariffs were abolished, larger markets for industrial products would be created. It was argued for example, that the creation of the Latin American Free Trade Area would halve the amount of foreign exchange needed for investment, if industries could be planned for the entire region.

Repatriating Profits

Rather than import substitution, the drive was now on for 'export oriented industrialisation'. The countries concerned were supposed to aid the process of industrialisation by promoting free trade and concentrating on industrial production of goods for the world market, bringing in foreign exchange. Implicit in this is the need to encourage foreign investment to provide the factories capable of competing economically on the world markets. So Third World governments began to legislate for the protection of foreign investment and its right to repatriate profits.

A year after the creation of the Association of South East Asian Nations (ASEAN) in 1966, Ford opened its assembly plant in the Philippines, and in 1969 the first of the Investment Incentive Acts was passed in the Philippines. Under the joint pressures of the IMF and the various international aid agencies, the Third World was gradually being transformed for the benefit of multinationals.

Ford was well prepared to take advantage of these changes, and the way they have operated within ASEAN shows how multinationals have used the new opportunities offered. In 1971, Henry Ford had talks with government leaders from nine Asia Pacific countries. He made it quite clear that **'complementation holds far more promise for the region than adherence to old style purchasing, assembly and manufacturing methods.'** (Ford: A Global Corporation – Ford publication, 1973)

Asian Cars

Attempts had been made in the past to create an integrated car industry in South East Asia, either within ASEAN or an enlarged area including Japan, Australia and New Zealand. Little had been done to implement this however, and the Philippines decided to push ahead alone – in fact to pre-empt any such moves. In May 1971 they announced their Progressive Car Manufacturing Programme. This is a scheme to encourage car manufacturers to produce in the Philippines by threatening exclusion from the market of those companies that would not comply with government criteria on local content and so on. Car assemblers had to submit their plans by January 1972, and despite the fact that this scheme did not yet have ASEAN approval, all the car companies in the area submitted plans for approval.

At first the Philippines government said that there was only room for the participation of three motor companies, and the unsuccessful companies would have to leave the Philippines. There were several criteria for deciding who would eventually be allowed to participate in the Progressive Car Manufacturing Programme. These included the contribution the companies would make to ASEAN car production, to the expansion of manufacturing in the Philippines, and to the transfer of technology to Filipino engineering. Most important of all was the proportion of the final assembled vehicles sold in the Philippines that would be domestically manufactured. The Philippines government was looking for a minimum domestic content ratio of 35% by the third and final year of the Programme.

Ferdinand and Imelda Marcos, Philippines tyrants

Popperfoto

Ford's plan was the establishment of a body stamping plant at Mariveles in the planned Free Trade Zone. Free Trade Zones are industrial estates where land, factories, electricity and other services are furnished by the host government, and complete freedom is granted from tariff restrictions or import duties. Direct incentives like tax concessions and investment grants are also offered by the host governments, and make Free Trade Zones highly attractive to foreign investment.

Free Trade Zones, like free trade areas, are being heavily promoted by an international agency, this time the United Nations Industrial Development Organisation (UNIDO). Founded in 1967 to promote the industrialisation of developing countries, UNIDO provides assistance in the establishment of Free Trade Zones in the form of preliminary surveys, feasability studies, and many other services short of actually operating the Zone. UNIDO is assisted by the Shannon Free Airport Development Co Ltd and by the ubiquitous World Bank. Free Trade Zones are supposed to aid the promotion of exports, the creation of job opportunities, and the transfer of technology to the Third World. According to UNIDO there are currently over 30 developing nations with plans for Free Trade Zones in their territories.

Philippines Plant

Ford's commitment to the Free Trade Zone at Mariveles in the Philippines was large, and its investment of 244 million Pesos, £18million, was important in encouraging other manufacturers to participate in the Zone. This promised investment was instrumental in buying Ford's way into the Car Manufacturing Programme. When the various plans were assessed, Ford only came fourth in the scoring system, and should have been excluded along with Renault and Nissan. However, the government decided to include Ford nonetheless. The two reasons given were the Marivales investment and the fact that Ford had earned most points for its contribution to an integrated ASEAN car industry, thanks to existing Ford plants in other ASEAN countries. The outcome was the opening of the Ford body stamping plant in February 1976 by Imelda Marcos, wife of the President of the Philippines.

This plant, in fact, contributes little to the Philippines economy: Even at its maximum output of 70,000 bodies a year it employs only 700 workers – in a country with an unemployment rate of around 50%. As for an integrated ASEAN car industry, the stamping plant is integrated only as far as Ford's own operations are concerned. Although the Car Manufacturing Programme's guidelines recommend the production of components that can be used by more than one manufacturer, car bodies are of course restricted in use to the manufacturers' particular models. The Ford stamping plant does supply to other Ford factories within ASEAN, but also sends Cortina bodies to Australia and other Asian countries outside of ASEAN, as well as body panels to Dagenham in the UK. A body plant makes very little contribution to the growth of technology and unlike an engine plant, for example, cannot be utilised in the development of other industries.

Finally it should be remembered that complementation, as it was so energetically sold by Henry Ford, was supposed to help accumulate foreign exchange by replacing imports with domestic products. In reality the Progressive Car Manufacturing Plan spends the region's scarce foreign exchange on the car industry, which is given preferential foreign exchange guarantees, without accumulating any surplus foreign exchange in return. **Ford's intervention in the Philippines, far from transforming the economy by utilising its potential for development, exploits and reinforces the existing situation for its own profit:** Ford has to make cars to make money, and has to make them somewhere. The interests of the local workforce or the host economy do not enter this decision. Ford's plans in Latin America give ample evidence of that.

The Wreckers

The founding meeting of the Latin American Free Trade Area (LAFTA) consisted of Argentina, Brazil, Mexico, Bolivia, Chile, Columbia, Ecuador, Paraguay, Peru, Uruguay and Venezuela. At the time, Ford had factories in Mexico, Chile, Brazil, Argentina, Venezuela and Peru. The plan was to create a free trade area by 1973, but a conflict of interests emerged between the nations concerned because of the differences in their sizes and degrees of industrialisation. In 1969, a sub-group of LAFTA was set up, called the Andean Pact, which excluded the big three: Brazil, Mexico and Argentina.

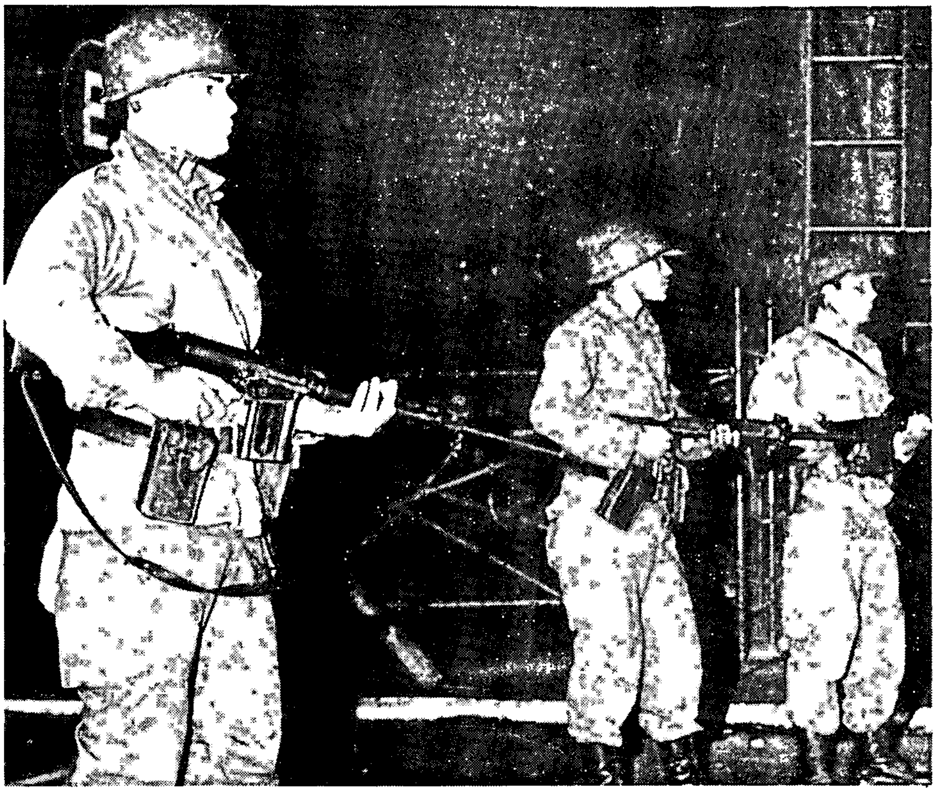
The Andean Pact countries adopted a much firmer position on the question of foreign investment, calling for a gradual transition to local ownership, and imposing limits on the amount of profit that could be repatriated by foreign companies. Peru had the most stringent regulations, demanding an immediate 50% stake in all foreign investments. Ford, which has always tried to insist on 100% ownership of its subsidiaries, withdrew from Peru by 1970.

In Chile, Ford responded to the 1970 election of Allende's Popular Unity government by embarking on a programme of economic destabilisation. More than 60% of the country's public transport system ran on Ford vehicles, and Ford also had about 35% of the car market. All these vehicles, particularly the public transport buses, depended on spare parts supplied by Ford. Before Allende's election, Ford imported appoximately $156,000 worth of spare parts into Chile each month. Immediately after the election, this supply was cut to just $15,000 worth a month. Credit to car dealers was also slashed.

The result was that the public transport system was thrown into total chaos. The Ford factory was taken over, but without components from other Ford factories it was practically useless. The Chilean economy, which Ford helped to wreck, is in pieces. Fiat, still operating there, has seen its monthly sales decline from 2000 cars a month to 100.

That left Ford operating only in Venezuela amongst the Andean Pact countries. There it manufactured Falcon and Fairlane models from America, and the Taunus from Germany.

The Andean Pact continued to discuss the viability of an integrated car production plan, but with the Pact countries supporting 24 plants producing 140 models for a market no larger than Florida's, achieving agreement on such a plan was not easy. Many of the factories would have to close and many of the models phase out, and



Law and order in Argentina

Keystone

competition between the states to protect their own interests was intense. However, eventually a plan was worked out, which does not depend on component manufacture at all. It allocates the manufacture of vehicles of different engine size categories to different countries, and this arrangement was finally agreed and signed in September 1977. The allocation of cars above 1500cc goes to Venezuela – the only country in the Andean pact where Ford produces cars, all of which are in this range. It seems an incredible coincidence that Henry Ford was in Caracas at the time of the signing, and he announced big expansion plans for the Venezuelan factories, worth $84million. The big three US manufacturers have each submitted plans for an 8 cylinder engine plant in Venezuela, in a bid to participate in the Andean Pact plans, and doubtless Ford's announced investment plans depends on its bid being accepted.

Ford publicity claims that '**for host countries multinational companies are a powerful engine for growth, especially in developing nations as foreign government aid tapers off. Multinational companies invest capital, create jobs, introduce technological improvements . . . in short . . . they are a positive force for economic progress.**' (Ford: A Global Corporation) The country most often cited to demonstrate this 'progress' is Brazil, which has grown remarkably rapidly in recent years. Between 1968 and 1974, Gross National Product grew at an annual rate of 10%. For Ford, Brazil became the most important market outside North America after Germany and Britain. In 1967, total Ford factory sales in Brazil were 32,000. By the peak year of 1974, they had reached 177,700, and in 1976 stood at 169,000 cars and trucks.

The Brazilian boom depended quite largely on the motor industry. The demand for components, steel, glass and other inputs, and the concomitant growth of roads, shopping centres and cement production, as well as the rapid growth of the petrochemical industry, all contributed to the economic expansion. The backdrop to this 'miracle' has been a change of policy concerning trade barriers and exchange controls similar to that of other Third World countries. The last stage of an attempt to reach a nationalist solution to the problems of dependancy was the Goulart regime, which embarked on a massive programme of land redistribution, nationalisation and so on. This came to an abrupt end in 1964 with a military coup, headed by General Branco.

He rapidly realigned Brazilian economic policy in the interests of international capitalism. The foreign exchange system was simplified, laws governing the repatriation of profits were revoked, trade unions were declared illegal, and the torture of political and trade union activists became commonplace.

But the growth of the Brazilian economy has been entirely dependant on foreign capital, and the more dependant the economy becomes on multinational investment and finance, the more profits and interest are repatriated. The Brazilian motor industry is over 90% owned by multinationals like Volkswagen, Ford and General Motors. The more successful these subsidiaries become, the more profits are remitted back to the parent country – in hard currency. Volkswagen, for example, is the largest car manufacturer in Brazil, and the largest exporter from Brazil. In the ten years from 1965 to 1975, it invested a total of $119.5-million, and $72.8million were reinvested out of profits generated. But in the same ten years, $70million were remitted directly back to Germany, and no less than $208.5million were paid to the parent company for licences and technology. In all, a total of $279.1million were sent back to Germany – a net outflow of $86.8million.

The Brazilian government allows all plant and machinery to be included in the capital valuation for the purpose of profit remittance – in reality the machinery Volkswagen installed in Brazil was obsolete plant shipped from Germany.

The General Motors subsidiary in Brazil has an investment valued at $38million, and an enormous debt back into the US of $200million – some one per cent of the entire foreign debt at the time it was incurred.

Ford has a long term debt of $84.6million, which must be repaid at between 6½ and 7½ per cent, irrespective of remittances of profits or payments for licences and technology. **However much the motor companies increase their output, or their Brazilian exports, the profits will eventually be repatriated to the US, or Europe or Japan.** All these debts are denominated in dollars, so they are insured against the devaluations of the Brazilian currency brought about by

Brazil's raging inflation, and continue to drain Brazil's foreign exchange earnings.

The vicious circle of balance of payments deficits leading to foreign loans, and foreign interest payments aggravating the balance of payments deficits, continues. Brazil is in no better a position to pay off its massive foreign debt – $30billion – than it was before it embarked on its rapid growth. In 1969 its debt was one and a half times its annual export earnings. This ratio is expected to be about one and three quarters times export earnings in 1977, but only at the expense of a crippling squeeze on the economy in an attempt to reduce imports. The interest alone on the foreign debt this year comes to $6.1billion, or over half Brazil's export earnings.

Social Costs

In 1972 the Brazilian government instituted a programme of massive tax concessions to car manufacturers if they boosted exports and helped alleviate the balance of payments problem. Ford took full advantage of this, and created an export programme worth some $1000-million over a period of five years. They supplied the 4-cylinder engines for the US Pinto from the factory in Taubate, and reduced production in Detroit. Diesel engines are exported to Japan, where they are fitted into trucks which are then exported to the US. Other car makers similarly turned their Brazilian subsidiaries into export bases. Yet three years later, Brazil still had a payments gap, including debt repayments, of $207.8million in the auto sector. Exports were worth $268.5million, but imports, inflated by investment capital of $83.4-million and loans of $228.4million, totalled $476million.

The truth is that the large multinational car firms, while reaping profits from government concessions and investment grants, have contributed nothing to the stability of the Brazilian economy, and their effect on social conditions in Brazil has been disastrous.

The Brazilian working class has born the brunt of the 'Brazilian miracle' and the super-profits of the multinationals. In 1976, 3,900 Brazilian workers paid with their lives in industrial accidents – the highest rate of industrial fatalities in the world. It is commonplace that for most of the population of Brazil, the 'miracle' has brought about a worsening of the conditions of intense poverty and misery.

Malnutrition causes seven out of ten deaths among children under five, according to the World Health Organisation. Infant mortality rates in 1970 were 105 per 1000 live births – the comparative figure for Britain is 19. Real wages have consistently fallen as inflation rages, and the Union of Metallurgical Workers claims that the cost of living index has been deliberately rigged by the government ever since 1973, to hide the real rise in prices. The top five per cent of the population increased their share of the total urban income from 28% in 1960 to 35% in 1970. This fact has been hypocritically criticised by Robert McNamara, president of the World Bank. **Yet it is the World Bank that must take much of the blame for the situation and as Minister of Finance Delfim Netto said, "they have never asked us to change anything and I am sure they will continue to loan in the same way".** Destitution and hunger are the nightmares behind the dream of Brazil's miracle.

Cheating the Poor

The motor industry, based in the suburbs around Sao Paulo, has added its own burden to the lives of car workers. Government regulations provide that after six months of continuous employment, a worker becomes entitled to payments from a state organised lay-off fund to which employers have to contribute – the Fundo Garantia Tempo Servico. In order to avoid this, about a third of the work force of the motor manufacturers is laid off every six months. If they are lucky, these workers will be re-employed by another manufacturer – for another six months. They work in the industry for years, without ever achieving any security of tenure or lay-off pay. The motor industry has created its own migrant labour force, with a third of the labour force constantly on the move, forming an army of relatively skilled but casual labour.

Ford has its own story to tell about the Fundo Garantia Tempo Servico. In 1973 it sacked thousands of workers from its Sao Paulo factories. They had been working for Ford since 1967, and were entitled to substantial payments from the Fundo. However, Ford had not put any money aside for this purpose, and refused to pay up. The workers, assisted by the labour tribunal sued the Ford Motor Company, and eventually won their case, but they received no money until 1977.

In 1977, car sales in Brazil fell sharply, as government attempts to halt imports and boost exports forced up the price of petrol, restricted credit, and squeezed the domestic market. For the first six months of the year, sales were 12% lower than they had been in 1976. Ford recently opened a tractor plant in Brazil, and the tractor market, too, is showing some decline.

In its attempt to recapture its market share in Brazil, Ford introduced a new model, the Corcelle 11 based on the new European Cortina. Henry Ford himself visited Brazil for the launch, and met with the President. He claimed that the company was losing $250 on every car sold in Brazil because of the government's price regulations, and poor market conditions. Ford claims to have lost $11million during 1976. **Ford's solution was that the government should give a subsidy to the company for every car it sold in Brazil. If the profit situation did not improve, serious thought would have to be given before any new investment could be sanctioned.**

At about the same time in Geneva, Lee Iaccoca was addressing the Swiss American Chamber of Commerce. If only multinationals were not hindered by codes of conduct or government regulations, what benefits they brought to developing nations – what positive effects they had had on countries like Brazil and Taiwan! The Ford message is clear: **"The host country can win by welcoming multinational corporations and learning all they have to teach."** (Ford: A Global Corporation)

History is Bunk?

Popperfoto

The North American operations of the Ford Motor Company are, and always have been, the hub of the Ford empire. Ideas, tactics and processes are developed in the home base and then adapted and exported. And the competitive relationship of the major auto companies in North America determines to a considerable extent their overseas strategies.

The introduction of the assembly line and mass production of the Model T gave Ford a domination of the US auto industry which lasted over twenty years.

'When they first attempted to assemble an entire car by the assembly line method, they put a frame on skids and pulled it from one end of the building to the other with a rope. A group of men walked along with it, grabbing parts from pre-placed piles as they went along. The next refinement was to station different men, or teams, by the equipment, and drag the chassis past them . . . As the process was refined, the number of man hours per car was cut from 15½ to 1½' (Herndon).

Mass Production

Before the computerised lines of today were ever thought of, the process had been streamlined and the workforce pressured to the point where a Model T was coming off the line every one minute thirty six seconds. Sales of the 'no frills' Model T burgeoned:

1910	21,000
1911	54,000
1912	82,000
1913	199,000

By 1919 monthly production was 86,000, and this had risen to over 100,000 per month by 1921. November of 1922 saw a new monthly record of 240,000.

While Ford concentrated on production figures, General Motors concentrated on profit margins. Henry Ford had an almost pathological distaste for the niceties of modern financial management, and ironically enough the financial and sales

experts who eventually gave General Motors its superiority had moved across from Ford to its rival in the post World War I period. Norval Hawkins was a sales expert who went over to GM at this time, and he opened the way for William H. Knudsen, who had supervised the planning and construction of Ford assembly plants both in the States and in Europe. Knudsen it was who led GM into its domination of the car market, originally as head of Chevrolet, and later as head of the entire company.

Against the advice of his son Edsel, who was president of the company, Henry Ford clung to the Model T through the twenties. It was, however, increasingly obvious that Chevrolet, with a car that was more aesthetically pleasing as well as having as standard equipment items which were extras on the Model T, was eating into Ford sales. Styling as an element of competition was winning its first big battle.

In 1926 Ford production dropped by more than a quarter of a million units. GM now had 28% of the US market. Ford tried a few cosmetic touches on the aging Model T but it was no use. When Henry Ford eventually gave in, the steps he took to implement the restructure of production dispelled any illusions popularly held about his humanitarianism. The plant was run flat out for the first part of 1927 in order to stockpile enough Model Ts for future demand. **When the last of a total production of over 15 million had rolled off the line, the plant was shut down and 60,000 workers were thrown out of work. The plant was closed for six months from May 1927. There was no unemployment pay, and the jettisoned Ford workers had to apply for city 'relief'.** Detroit had a relief bill $1million higher than in 1926.

Hunger March

Meanwhile Ford was building a new plant on the River Rouge which would employ a lot less men than had been put out of work. For years Detroit was plagued with unemployment. Only half a million Ford cars were produced in 1931 — a drop of one million from 1929. **In 1932 three thousand unemployed marched to the gates of the Ford plant where they were fired on by the guns of the Dearborn Police and the Ford Service Department. Four marchers were killed and over a score injured.**

Working conditions in the new plant were worse than they had been in the old one. Speed-up had been a fact of life at least since the introduction of the 'Five Dollar Day' in 1914. Henry Ford had gained a lot of favourable publicity from doubling the wage rate and shortening the working day from nine to eight hours. But the workforce had paid a heavy price in terms of speed-up as Ford reduced the cost of the Model T to boost sales. Ford had benefited also from a decline in labour turnover and absenteeism. The Five Dollar Day had effectively created a large pool of unemployed who waited at the gates of the factory for vacancies.

The $5 Day

A week after the new rate had been announced, together with a hiring programme of four or five thousand new men, there was still a crowd of ten thousand waiting in the snow for jobs which had already been filled. The Ford method of dispersing the surplus was to turn fire hoses on them. In 1916 the Ford Sociological Department stated that 'looked at from a cold-blooded point of view of business investment (the Five Dollar Day) was the very best investment (the Ford Motor Company) has ever made'.

'Speed-up' was also standard practice in the new Rouge Plant, and to the pressure of the line was added the sheer physical fear engendered by the Service Department.

'Ford, the onetime humanist, had publicly stated that men worked for money and were kept in line through fear . . . so while Sorenson and his straw bosses drove the men mercilessly, Bennett's army of thugs kept them in line. . . . The speedup aged men prematurely; when they could no longer produce they were discarded. Bennett's spies infiltrated the plant. The result was the occupational disease known as Forditis. Men had ulcers and the shakes. If they talked at all on the job, it was out of the sides of their mouths' (Herndon).

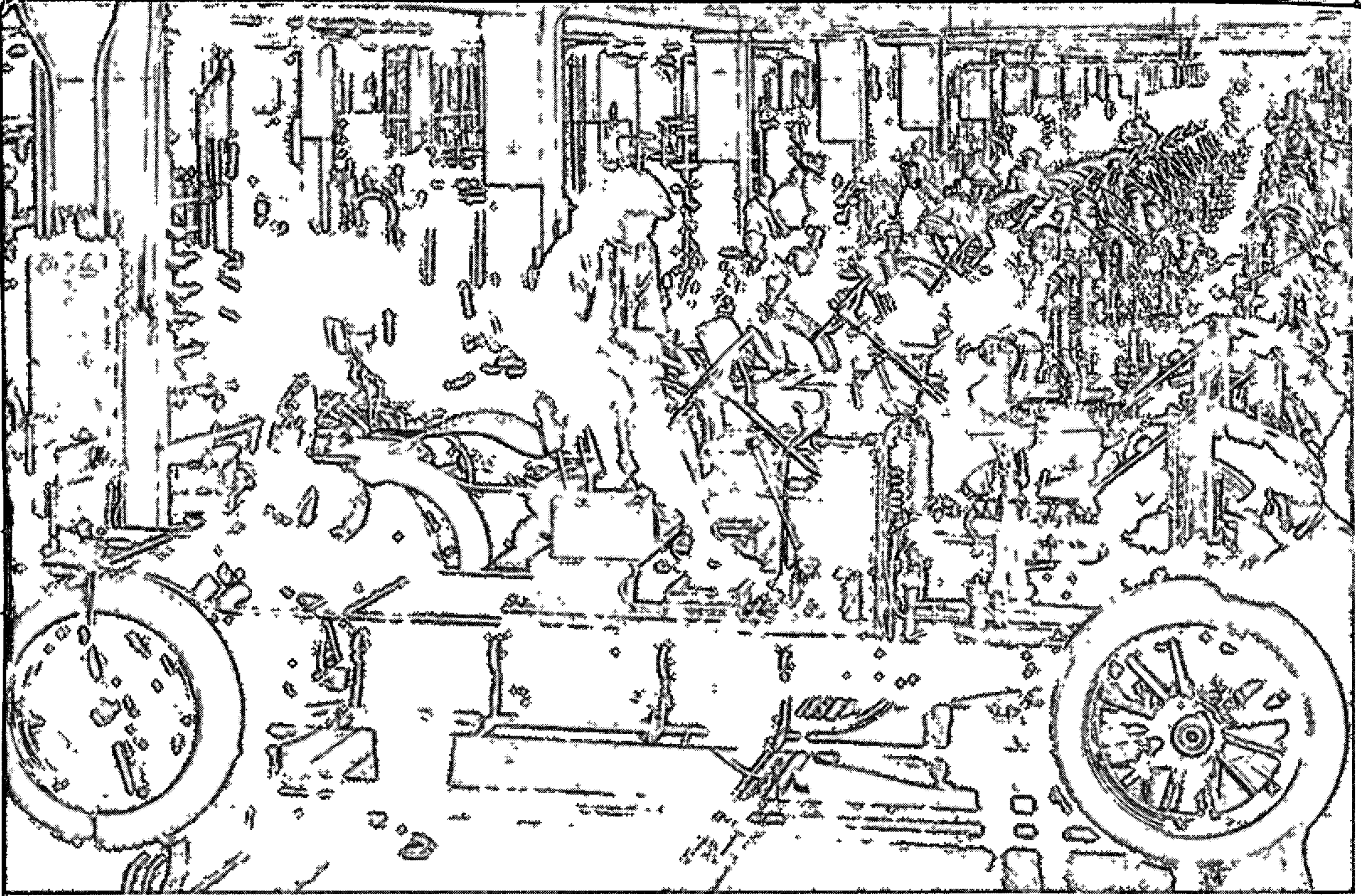
Bennett was a thug who had ingratiated himself with Ford, and as Ford grew more senile, Bennett grew more powerful in both factory and boardroom. He ran the Service Department of 3,500 private police, including hundreds of goons armed with pistols and clubs, leasing franchises inside Ford plants to local gangsters, and fighting any attempts to unionise with sickening brutality. The justification for this brutality came from Henry Ford, who had stated **'We will never recognise the United Auto Workers or any other Union. Labour union organisations are the worst things that ever struck the earth'.**

Ford also refused to be depressed by the depression. Again and again between 1929 and 1934 he gave out statements that shocked those who had watched the agony in the breadlines. He said the depression was 'wholesome', that people would profit by the 'illness' because 'the recovery is prolonged'; that 'these are the best times we ever had'.' (Burlingame)

Of course Ford could afford to feel remote from the bread-lines. His personal income in 1929 was almost $14million, with Edsel receiving a further $8million. Strikes called by the United Auto Workers had secured contracts at both General Motors and Chrysler by the spring of 1937, and 'Ford next' was the war-cry. In May of the same year the city of Dearborn, prompted by Roosevelt's New Deal legislation, gave union organisers permits to distribute leaflets to Ford workers outside the gates of the Rouge plant. On May 26th the UAW representatives, 60% women, went to the gates at the shift change-over time. In the 'Battle of the Overpass' – the overpass was a pedestrian bridge over the road outside the plant – the UAW people were severely beaten up by Bennett's men. The two senior union representatives, Walter Reuther and Richard

Top: Early assembly line

Bottom: Queuing for their cards. 1946



Popperfoto

Keystone

Frankensteen, were particularly badly beaten and thrown down the stairs.

Camera-men and reporters from the national press had their equipment smashed, were beaten up and chased in cars from the scene of the battle. This initiated a press campaign against Ford. In Kansas and Dallas union workers received similar treatment. Following these events there was a period of increased violence inside the factories. In a court case the company was found guilty of several violations of federal law, and eventually, after the discharge of eight workers for union agitation, the workers struck, picket lines were set up and barricades erected.

Eventually the strikers won, an election was held and 70% of the workers voted for the union. A contract was drawn up. In exchange for dropping all the cases against Ford the union received its most generous contract ever.

Ford's son, Edsel, died in May 1943 and Ford himself, 80 years old and completely unfitted for the organisational task necessary, assumed the company presidency.

With company organisation in a chaotic state, the War Production Board and the Armed Services felt that the production of B24 aircraft at Ford's Willow Run plant was under threat. In August 1943 Henry Ford II, the old man's grandson, was released from the Navy and sent to sort things out.

On September 21st 1945 Henry Ford II was formally elected president of the company after Edsel's wife had threatened to sell her Ford stock if Henry I did not hand over the reins. Bennett was ousted, and Henry Ford II found himself in charge of an ailing giant of a company losing $10million a month. Without war contracts and money stashed away in various banks the end would already have come. Now that war production was over, the cash reserves were diminishing fast; and Ford was losing $300 on every car sold in competition with Chevrolet.

Henry Ford II

Practically the first act of the new president was to sack 1,000 employees, and in the course of his first year at the helm no less than 32,000 Ford workers in the USA lost their jobs.

During the war productivity had fallen 34%, and according to workers at the Rouge plant 'the place was running wild'. Wildcat strikes were frequent, and with wages having been frozen since the beginning of the war, the recently recognised UAW put in a major claim. **Henry Ford II used a tactic to deal with this situation that has been part of management's armoury ever since. He bought off the claim – but got the union to police its own members. The company agreed to an 18½% rise, while the union 'took definite steps' to control its membership, agreeing that its members could be fired for instigating or taking part in work stoppages.**

The first Henry Ford built, and then all but ruined, the Ford Motor Company by autocratic rule. The second Henry Ford maintained the prerogative of the final decision in all major matters. He also bought in all the help and skill he could to reorganise the company, get the accounts in order and replan production and marketing.

General Motors was the industry leader because it had wedded the production techniques of Fordism to the marketing strategies known as Sloanism after Alfred P. Sloan Jnr., president and chief executive officer of GM from 1923. To these GM had also added a system of company structure and financial control. The Ford Motor Company had attempted to survive through Fordism alone, and as a result had lost its market supremacy to GM in the twenties.

Determined that now was the time to compete with GM on more equal terms, Henry Ford II lured across Ernest Breech from GM to teach Ford management the GM system.

Scores of GM men came over with Breech. The Ford Motor Company became decentralised into divisions, with a strict profit orientation, research and development investments, and scientific costing. Management personnel were made competitive with one another, both for divisional profits and for the rewards on a personal level of financial bonuses and upward mobility in the hierarchy. A group of ex-Service officers to be known as the Ford Whizz Kids were hired, including Robert McNamara, who was to become a Ford president, US Secretary of Defence, and president of the World Bank. But for all the new talent hired for the reorganisation Henry Ford II firmly retained the ultimate authority.

The Ford family has always insisted on financial control of the company, and, given that control, has never been able to resist the opportunity to wield personal as well as financial power via the top executive position. The family's financial control was threatened on the death of Henry Ford I by the prospect of having to sell large amounts of shares in order to pay death duties, as the Roosevelt New Dealers had jacked up inheritance tax to 91% to help pay for the new social welfare measures being introduced.

Ford Foundation

Between them Henry Ford I and his son Edsel had owned 96.5% of the Ford Motor Company stock, with Mrs Henry Ford owning the other 3.5%. Edsel, with 41.5%, had established trust funds for his four children, thereby circumventing the inheritance tax laws. Henry Ford I, however, had resisted all attempts to break up his majority holding.

'As matters stood at that crucial juncture, the government waited anxiously in the wings for its whopping 91% of the estate – unless, of course, the experts should conjure up an eleventh hour loophole. Thus was born the Ford Foundation for Human Advancement' (Demaris).

The Foundation had actually been incorporated in 1936 with a $25,000 grant, and had made small grants in and around Detroit, most of which were beneficial to the company. The charter of the Foundation stated, 'The purpose or purposes of this corporation are as follows: to receive and administer funds for scientific, educational and charitable purposes, all for the public welfare, and for no other purpose . . .'

After Henry Ford I died in 1947 at the age of 83, 88% of Ford Motor Company assets in the form of a new issue of convertible non-voting stock – Class A shares – were handed over to the Ford Foundation. The family retained the non-voting stock – Class B shares.

'On the foundation's books this (stock) was given the value, for tax purposes, of $416million, but its real value, as measured by the earnings of Ford Motors, was at least $2½billion' (Macdonald).

The deaths of Henry Ford I and Edsel Ford realised a combined inheritance tax (on property other than Ford stock) of $30million. This was on total assets with a market value of over $3billion – i.e. 1%. Thus financial control stayed in the family – and the Ford Foundation embarked on its own growth and significance.

Beginning in 1956 the administrators began to diversify the portfolio following the going public of the Ford Motor Company. Large blocks of stock were sold back to the company, which converted it to voting securities which were gradually put on public sale.

'The family retained possession of 40% of the voting rights in the form of 2,700,000 Class B shares. In all it held 12.1% of all Ford stock. It was enough to ensure that Henry Ford II ran the Ford Motor Company as he liked. The sale also provided the Ford Foundation with an initial $640,725,445' (Beynon).

By 1969 the Ford Foundation had reduced its holding of Ford's outstanding stock to 25%, but its other investments were paying dividends, and at the end of fiscal 1971 the Ford Foundation had assets of $3.2billion. It has turned into a multinational operation of great political influence, dispensing large sums of money, particularly overseas. It has far more overseas staff than home staff, and has extended the influence of Ford money and ideology with a strong emphasis on those Third World countries considered to be 'politically sensitive'. For example,

River Rouge strikers winning the long and bloody battle for unionisation. 1941 *Keystone*

The penalty for attempting to organise at Ford

between January 1965 and November 1967 the Foundation made direct $US grants to at least 25 foreign governments or regions, including UAR, Jordan, Lebanon, Zambia, Nigeria, Pakistan, India, Ivory Coast, Syria, Iraq, Tanzania, Mexico, Kenya, Tunisia, Antigua, Cameroon, West Bengal, Chile, Brazil and Nepal. The strategies of company and foundation have not always coincided.

In the early 1970s the Foundation gave a $99,700 grant to help establish a school in Tanzania for Mozambiquan refugees from the then Portuguese colonial power. The Portuguese Foreign minister attacked the Foundation for allegedly financing the Liberation Front of Mozambique. Pressure was brought to bear on the Ford Motor Company's assembly plant in Lisbon. The grant was terminated, and the *New York Times* reported that 'The Ford Foundation is reported to have assured the Government of Premier Salazar that it would be consulted before any future grants are given to African areas of particular interest to Portugal. . .'

The Director of the American committee on Africa sent a telegram to the Ford Foundation President, complaining that 'the Ford Foundation is being used for political purposes by the Ford Motor Company and tax status should be open to examination by the Bureau of Internal Revenue. The fact that a grant for educational aid to Mozambique refugee students was recently terminated by the Ford Foundation is interpreted as willingness of the Foundation to yield to pressures of the Motor Company and Portugal.'

Despite the heavy capital expenditure demanded by the post-war reorganisation and the introduction of a brand new post war model (instead of an updated 1942 model), the Ford Motor Company showed a profit of $177million in 1949. This was the beginning of competition on a model-for-model basis. The new Ford was a direct competitor with GM's Chevrolet, gaining steadily on it as the new annual versions came out, until by 1954 it was close to outselling Chevrolet. Ford, however was using two body shells for 97% of its production at this time, while GM had a far wider range, particularly in the larger car sector of the market – the sector which provides the greatest profit margins. In 1955 Ford started to plan the extension of its own range in order to challenge the GM and Chrysler stables on a wider front.

Unlike the Europeans, the Americans had no desire for a small car. The import market was practically non-existent, and the small foreign cars that found their way into the country were looked on as curiosities. Yet by 1968 the home industry was sitting up and taking notice of the half million VW sales in the USA in that year.

'Small cars give Detroit big headache' claimed the *Washington Post* with some accuracy. VW led the importers by a wide margin. Ford had tried to buy up the VW company after the war without success. GM however was making Opels in Germany, and imports of these came second. On the West Coast in particular Toyota and Datsun were making their first appearances.

The American car makers grumbled about import penetration, and Henry Ford in particular complained about the Japanese on the grounds that competition was all very well, but the Japanese unfairly did not allow American producers into their country. However Ford was busily building up its overseas operations, especially in Europe, and activity in the USA was confined to the continued competition with GM and Chrysler.

Throughout the 60s the American auto industry spent a large portion of its net profits on expanding production facilities. GM and Ford relied almost entirely on internally generated funds, while Chrysler had a far greater dependence on the capital market.

Working from the overseas base originally built up by Henry I, overseas expansion, particularly in Europe, also went ahead at a considerable rate once Ford was back into profit. Due partly to the original extent of Ford's overseas base, and partly to the fact that GM's strength lay in the profitability of large American cars while the European market was concentrated around smaller model sizes, from 1965 onwards Ford's operations overseas have given Ford an advantage over GM in the external market.

Ford's capital plant and equipment has been increased in value by $4,064.1-million, or 268%, over the period 1960-1976 from $1,516m. to $5,580m.

US Plant Locations

Motor Vehicle Assembly Lines

Atlanta, GA
Chicago, IL
Dearborn, MI
Lorain, OH
Pico Rivera
Los Angeles, CA
Kansas City, MO
Louisville, KY
Mahwah, NJ
Metuchen, NJ
Wayne, MI
San Hose, CA
Twin Cities, MN
Wixom, MI
Oakville, Ont
St Thomas, Ont
St Louis, MO
Michigan Truck
Norfolk, VA
Canada Truck, Ont

Engine Assembly Lines 1976

Lima, OH
Cleveland, OH
Windsor, Ont
Fairfax, OH
Livonia, MI
Sharonville, OH

Automotive Component Plants

Castings

Sheffield, AL (Aluminium)
Flat Rock, MI
Dearborn, MI
Cleaveland, OH

Metal Stampings

Chicago Heights, IL
Woodhaven, MI
Cleveland, OH
Dearborn, MI (Tools and dies)
Buffalo, NY
Maumee, OH

Chassis

Indianapolis, IN (power train, cold formed parts)
Dearborn, MI (frames)
Sterling Heights, MI (Rear axle, Front end suspension, drive shafts)
Monroe, MI (Wheels, coil springs, bumpers)
Canton, OH (forgings)

Industrial engines and turbine plant

Dearborn, MI

Steel

Dearborn, MI

Glass

Dearborn, MI
Tulsa, OH
Industrial and Chemical products
Mt Clemens, MI (Paint, vinyl products)
Utica, MI (Soft trim)

General Parts

Plymouth, MI (Heaters, air cond'ners)
Rawsonville, MI (Carburetors, powdered metal parts, alternators, small motors, fuel senders, master brake cylinders)
Saline, MI (Plastic parts, instruments)
Ypsilanti, MI (Horns, distributors, ignition components, shock absorbers, starters, regulators, ignition coils)
Green Island, NY (Radiators, leaf-springs, heater cores)
Sandusky, OH (Lamps, starter drives, zinc and aluminium die cast parts, window regulators, air cleaners, oil filters)

The Multinational

The Direct Investment confers advantages that no importer could enjoy. A company that apparently provides jobs and export earning is not treated in the same way as an importer of foreign goods.

The International Division was formed in 1949 to co-ordinate the activities of the company's 36 overseas subsidiaries. Today there are 55 active overseas subsidiaries, operating in four major groups: Europe; Latin America; Asia-Pacific; and Mid-East and Africa.

In 1976 International Operations accounted for 31% of the company's sales, 44% of its profits, and 46% of its employment. Given the saturation of the American car market, and the squeeze on profit margins, these shares are likely to grow.

Data by Geographic Area 1976 *(money in millions of $, employees in 000s)*

	Sales	*%*	*Net Profit*	*%*	*Investment*	*%*	*Employees*	*%*
US & Canada	19858	69	546	56	351	64	235.9	53
Europe	5847	20	305	31	160	29	133.8	30
Latin America	1783	6	71	7	33	6	49.9	11
All other (mainly Asia-Pacific)	1352	5	61	6	7	1	24.3	5
Totals	28840	100	983	100	551	100	443.9	100

In 1976 Ford's share of the world car market outside North America was 9.5% with 1.5m cars sold. Ford's major competitiors outside North America were Toyota, with a 9.8% share of the car market, Volkswagen with 9.5%, Nissan with 9%, General Motors with 8.4% and Fiat with 8.3%. Ford trucks sold 348,000 units, giving a market share of 8.5%.

Ford Europe

The heart of Ford's international operations is Europe, where some two-thirds of the company's overseas sales take place. Ford of Europe co-ordinates the activities of 15 separate national companies with 135,000 employees in a market of some 350m people. In 1976, Ford had record sales of 1.2m cars and trucks. Car sales, up 30% from 1975, totalled 1.1m exceeding the 1972 record by 38,000 vehicles. The 30% increase in Ford sales compares with a 13% rise in total European car sales, and brought Ford's market share up to 11.2% from 9.8%. Sales of Ford-built trucks were 144,000 in 1976, compared with 127,000 in 1975: a market share of 13%.

Ford plans to spend some £800m on expansion and modernisation in Europe in the three years to 1979. In the previous five years it spent some £2,300m, including several major projects such as the Valencia plant. No major new construction projects are planned.

Sales in Europe accounted for 20.3% of Ford's total sales in 1976, and a much larger 31% of total profits. 'The increases in earnings outside the United States and Canada during 1975 and 1976, primarily were attributable to European operations.' (Annual Report 1976).

Ford make five passenger cars in Europe: the Capri; Cortina (Taunus); Escort; Granada; and Fiesta. These five cars are assembled at nine centres, and no model except the Granada is dependent on one centre alone. The Granada is built only at Cologne (Germany), the Escort at Cologne and Saarlouis, while the Cortina (Taunus) and the Escort are built in both Germany and Britain. The Fiesta is built in Spain for most of Europe, in Germany for Europe and export to the US, and in the UK for Britain, Scandinavia and Belgium. Models are assembled in other countries in Europe, such as Portugal or Ireland, but this is for local distribution only.

Ford vans are built in Genk (Belgium), and Southampton (UK), while lorries are manufactured at Langley (UK: A and D series) and Amsterdam (Transcontinental). Production of lorries was centralised at Langley to be in a position to assault the European market when Britain entered the EEC, but this strategy was not especially successful.

Tractor operations are co-ordinated from Basildon (UK), and assembly also takes place in Antwerp (Belgium). The acquisition in 1971 of Richier S.A. of France brought Ford into the industrial machinery market, and this subsidiary makes earth moving equipment, excavators and so on. Although only the Cortina/Taunus engines are made in two plants, all but the small Fiesta engines are used in at least two different models. The three major centres of engine production are Cologne (Germany), Dagenham (UK) and Valencia (Spain).

Ford U.K.

Ford is now the largest seller of cars in the UK. It took market leadership from Leyland in the first six months of 1977, more as a result of Leyland's weakness than of any surging forward of its own. However, the Ford Cortina and Escort were comfortably ahead in the UK car sales league, and all five of the company's passenger cars were in the top ten list:

Retail Car Sales: UK-January to June 1977

1.	*Cortina	70,911
2.	*Escort	54,134
3.	Marina	35,536
4.	Allegro	31,059
5.	Mini	31,035
6.	Chevette	30,413
7.	*Fiesta	23,777
8.	*Capri	22,408
9.	Cavalier	20,810
10.	*Granada	18,470

*Ford

Ford had a 27.1% share of the UK car market, with 190,000 cars sold in the first six months of 1977

1976 was a record year for Ford UK – it swept to record profits and exports, with a substantial increase in productivity and a 20% improvement in vehicle sales. The number of Ford workers rose by about 1000 overall to 68,000, but they produced 600,000 vehicles, against 532,000 the year before. **On a crude productivity gauge this means that Ford went up from 7.95 vehicles per worker (including tractors, trucks and cars) to 8.83 vehicles per worker in 1976.**

The company's profits, at £121.6m pre-tax, were almost double the previous high of £65.4m in 1973, and compare with profits of £14.1m in 1975. The value of direct exports (i.e. ignoring imports) went up almost 49% from £452.3m in 1975 to £631.8m in 1976, as Ford took full advantage of the falling price of sterling. The actual number of vehicles exported rose too, however, by 27% to 406,000. Ford reversed the trend of the previous few years toward rapidly increased bank borrowings, and reduced its loans by half, from 129.2m to £63.4m. It had sales of £1.6b compared to £1.1b in 1975.

'The Ford results demonstrate just how well-run companies, especially exporters, can have benefitted from recent Government concessions. While the group's wage bill, thanks partly to the Pay Code, rose by 19%, sales jumped by 42% (slightly faster, in fact, in the home market taken separately). Only £7m of tax is payable.' (*Financial Times* 26.3.77).

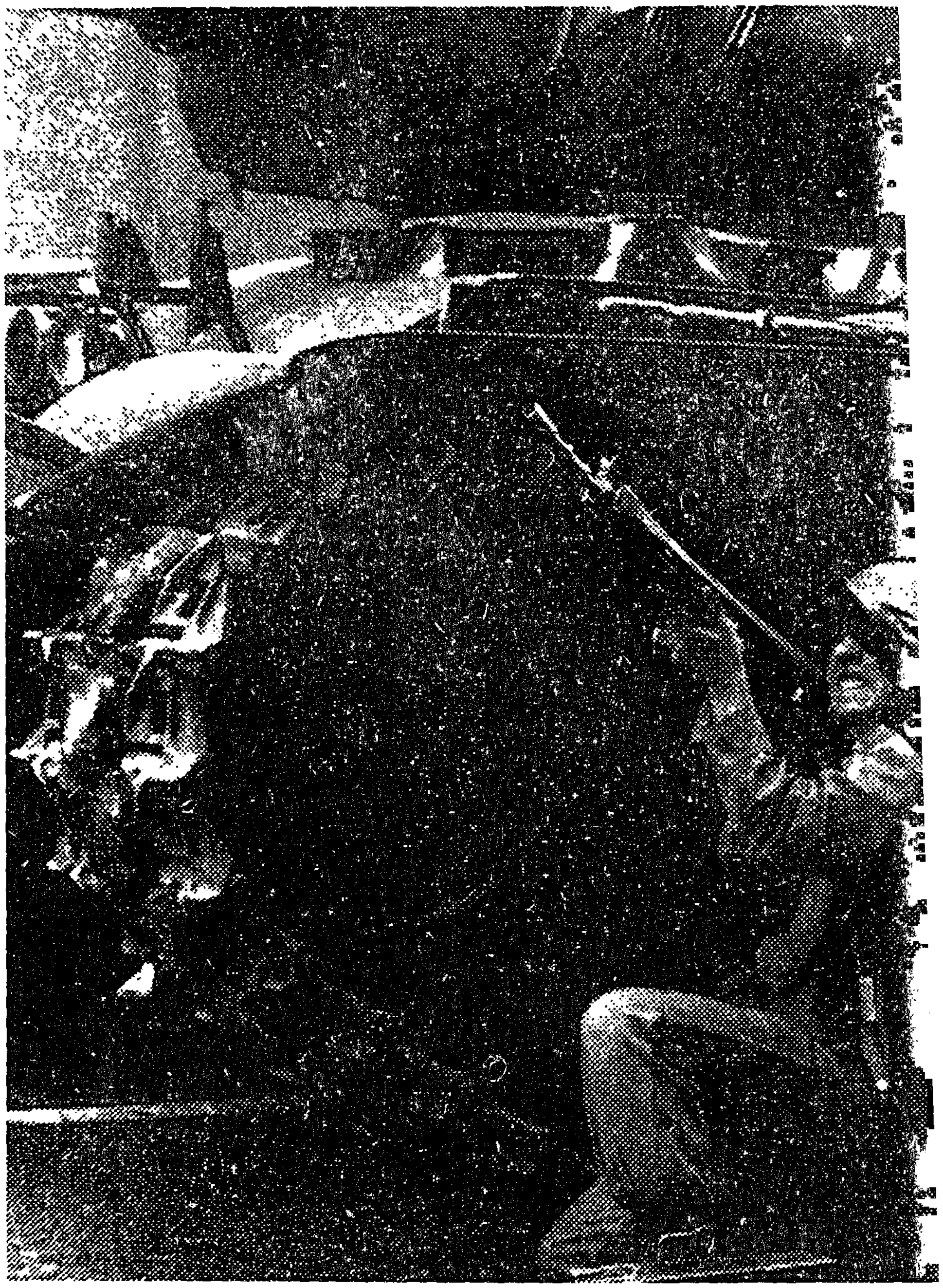
Plant	*Employment*
Dagenham	29,000
Halewood	14,000
Leamington	1,400
Basildon Tractor	3,700
Basildon Radiator	900
Dunton	3,500
Belfast	1,000
Daventry	1,500
Enfield	1,300
Warley	1,750
Southampton	4,000
Swansea	2,000
Aveley	900
Woolwich	600
Croydon	300
Treforest	400

Ford Germany

After North America and Japan, Germany is the largest vehicle producer in the world. It is the largest producer in Europe, and second largest vehicle exporter in the world after Japan, ahead of France, Canada and the US. Ford-Werke A.G. is Ford's biggest overseas subsidiary.

European car and truck production 1976

Germany	4.3m
France	3.4m
Great Britain	1.7m
Italy	1.6m



1976 was an excellent year for Ford-Werke, and the production losses sustained during the recession years of 1974 and 1975 were made up. A record 812,800 cars and trucks were produced, an increase of 28.1% over 1975, helped by the introduction of the Fiesta in May 1976.

Production by plant

	1976	*1975*	*% change*
Cologne	242,117	194,142	24.7
Saarlouis	244,490	218,993	11.6
Genk	326,191	221,401	47.3
Total	812,798	634,536	28.1

The Capri and Granada were assembled in Cologne, the Fiesta and Escort in Saarlouis, and the Taunus (Cortina) and Transit in Genk. Although Genk is sited geographically in Belgium, the plant is accounted as part of Ford Werke. Engines for the Pinto and Mustang were exported to the US from Cologne, over 4000 kits for Granada assembly in South Africa were produced, as was production material for Taunus (Cortina) assembly in Holland. The average daily production of vehicles was about 3,500 units.

Domestic sales of Ford vehicles were 354,915 units, an increase of 13.3% over

Chile's reign of terror begins, backed by the Ford Motor Company

1975. This included 10,500 imports, mainly from Holland, Britain and the US. The rest of Ford-Werke's production, 466,723 units, was exported – a rise of 41%.

Ford is the third largest vehicle producer in Germany, after Volkswagen and Opel (GM). In the commercial vehicle market, Ford maintained its share in a static market with Transit vans, the A and N series (the N series was specifically designed for the German market, based on the successful D series that had sold in Britain), and the heavy 'Transcontinental' from Amsterdam.

Ford Werke employed 52,900 workers at the end of 1976, of which over 42,000 were hourly paid manual workers – a large proportion of these were immigrant workers.

Cologne	31,316
Genk	11,267
Saarlouis	7,852
Wulfrath	850
Duren	11,644
Total	52,929

This was an increase of 5,000 over 1975 – although 8581 workers were laid off in 1974 and 1975. Ford claimed record profits in 1976 of DM627.8m (£159.7m), up 121% on 1975, and paid DM720m (£183m) in dividends.

Ford Latin America

As recently as the beginning of 1975 Ford was saying 'Latin America – increased share of larger market'. In November 1974, Ford of Latin America was formed to co-ordinate the activities of Ford's subsidiaries in Argentina, Brazil Mexico, Uruguay and Venezuela, and direct sales operations in many other Latin American countries.

At that time Ford had 980 franchised dealers in the area, and sales of cars and trucks were 235,900 and 120,300. (Compare with Europe's 1.2m). This represented 16.9% of the entire Latin American car market, and 25.4% of its trucks. Unlike the rest of the world, these markets were still growing.

Retail Sales of Ford Cars and Trucks Brazil

	Cars	*Market share*	*Trucks*	*Market share*
1976	127,160	17.0	42,340	29.0
1975	122,978	17.3	49,257	33.3
1974	130,215	19.0	47,483	32.6
1973	105,680	17.6	39,059	29.7

Since then, after two years as 'a major bright spot on the world automotive scene', the recession has caught up with Latin America, and far from continuing to grow, vehicle sales have declined. Total car sales fell 3% in 1975, a further 1.2% in 1976 and more in 1977. Truck sales were static in 1975, and fell 1% in 1976. During 1976 Ford's car sales dropped 5% to 212,000 cars – a 15.6% share of the market. Truck sales rose from 115,000 to 116,000, a 23.7% market share.

During the early 1970s, Ford invested heavily in Latin America, adding some 360,000 square feet to their facilities in 1973, and 1.4 million sq ft in 1974. Capital expenditures have fallen since, to $47m in 1975 and $33m in 1976.

By 1976, 6.2% of all Ford's sales were in Latin America, and this represented 7.2% of Ford's total profits.

Ford Brazil

Brazil is the largest and most important vehicle market in Latin America. For the ten years till 1975 the Brazilian car market grew at an average 20% a year. In 1975 the whole Brazilian economy suffered a sharp decline, petrol prices rose by more than 75% and the car market grew only 3%. In 1976 it grew just 5%, and the signs are that 1977 will show a fall in the market of 10 to 15%. Ford is the third largest manufacturer in Brazil, after Volkswagen and General Motors.

In the first four months of 1977, sales of vehicles fell to 281,215 vehicles – a full 10% on the same period in 1976. Ford and General Motors are the worst hit.

Over 1000 of Ford's 22,000 workers in Brazil were laid off between January and March 1977, and more have since lost their jobs. According to Lee A. Iaccocca, Ford's President, Ford is losing $250 on every car manufactured in Brazil. Ford makes medium sized and large passenger cars, and petrol and diesel lorries, in Brazil, and has been particularly hard hit by recent Government measures to restrict petrol consumption.

Ford of Brazil lost Cr153m ($11.2m) in 1976, after a net profit of Cr119 million ($8.7m) in 1975. During April 1977, Ford cut its car output by 47% to only 3,502. The Sao Paulo based motor industry had sacked around 5,500 car workers by April 1977.

Ford had been expanding its investment in Brazil before 1975. Production of four cylinder engines began in 1974, following completion of engine and casting plants at Taubate. During 1974, stamping and assembly capacities were increased. A new tractor manufacturing and assembly complex, started production in 1976 – aimed at the heavy tractor segment of the fourth largest tractor market in the West. In 1976 too, Ford of Brazil began shipping engines to Japan, where Toyo Kyogo manufactures pick-up trucks that are then exported to Ford US for sale in the United States.

Ford has been operating in Brazil since 1920 – between 1925 and 1927 three new assembly plants were built. In 1967, Ford took over Willys Overland do Brazil – the second largest manufacturer of cars and trucks in the country, with more than 3000 dealers, 9000 workers and three assembly plants.

Argentina

In 1973, in its Annual Report, Ford wrote 'In a series of attacks during 1973 against several foreign and locally owned businesses in Argentina, terrorists killed two employees of Ford in Argentina and wounded three others. Since these tragic events, the Company has received assurances from the Argentine government that it will provide for the safety of Ford's employees and facilities, which have been placed under military protection.' A little later Ford moved all its non-Argentinian staff, some twenty people, mostly American, to neighbouring Uruguay.

The sort of military protection Ford receives from the Argentinian government today is revealed by items like this: 'More than 9000 car industry workers defied a military Government ban on strikes and yesterday continued stoppages . . . the Government decreed jail terms of one to ten years for strikers.' *(Financial Times* 10.9.76). The Argentinian regime is perhaps the most systematically repressive in the whole of Latin America – torture of prisoners is commonplace, and hundreds of trade unionists languish in jail.

Beset by inflation, and the general economic recession, the Argentine car market fell by 15% in 1975, and a further massive 25% in 1976. Ford have just been holding their share in this shrinking market . . . but Argentinian Ford workers did not.

Market Share	*1972*	*1976*
Cars		
Units sold	29,095	19,760
Market Share	14.8%	15.2%
Trucks		
Units sold	18,900	13,104
Market Share	29.3%	27.3%

Ford also has an Argentinian subsidiary Transax, which is the local industry's primary source of axles.

Venezuela

Venezuela's population – although relatively small at 12.6 million – is seen as one of the richest markets for car-makers in all Latin America.' *(Financial Times*

Ford South Africa

'Brightest spot on the South African motor industry scene', is how the South African newspaper *The Citizen* described Ford's Cortina assembly plant at Port Elizabeth in August 1977. Ford has been selling cars in South Africa since 1928, but in 1961, after the Sharpeville massacre and the South African withdrawal from the Commonwealth, their investment was stepped up. The Government, in an attempt to insulate South Africa from external economic and political pressure, introduced a local content plan, restricting the import of cars, providing tariff protection for locally produced parts, and awarding bonus import permits to firms using more locally made parts in their cars.

As a response, Ford announced plans to build a new engine assembly and machine plant, costing $11.2million. The complex at Port Elizabeth currently produces cars and trucks, and Ford is now the largest motor manufacturer in South Africa. It has a market share of about 20%, and its 1976 sales, which were not especially high, totalled $288million.

Ford is very sensitive about its presence in South Africa, and makes a great play of its 'progressive' labour policies. In May of 1977, together with other US companies in South Africa, it signed a 'Manifesto' on black employment practices. The Manifesto calls for non-segregation of eating and work facilities, equal and fair employment practices, equal pay and an increase in the number of Blacks in management and supervisory positions.

In an interview in *The World* before it was banned, Ford's public relations manager said that the principles were nothing new to Ford, and "as far back as 1971 our company introduced equal compensation and fringe benefits for all."

This is true as far as it goes. The figures do show an increased number of Blacks in the higher grades between 1972 and 1977. Yet the majority of black Ford-workers are paid only 50% above the Poverty Datum Line' – 'absolute bare minimum for survival. This works out at about £20 a week for a family of five. In 1976 a white family of four living on £74 a week got headlines and the 'housewife of the year' award from the *Johannesburg Star*. Subsequently, doctors recommended additions to the family's diet as it was 'deficient'.

Collaboration

The real reason for Ford's 'progressive' labour practices is revealed in its Annual Report for 1972. 'The demand for skilled workers and technicians of all kinds is growing faster than the supply. Since whites are fully employed the coloured and African population must be increasingly depended upon to fill such positions.' This is why Ford petitioned the Minister of Labour to have the quota for the proportion of black workers allowed in Port Elizabeth raised from 55% to 76% for Ford factories.

In 1973 Ford justified its collaboration with apartheid by saying that industrialisation in South Africa could bring social changes that would benefit all racial groups. After the massacres in Soweto and the other African and Coloured townships, this position is increasingly untenable. Nevertheless, in June 1977, shareholders at Ford's general meeting rejected a call for Ford to shut down its South African operations, and cease buttressing the apartheid government. The proposal to sever links with South Africa, sponsored by several church and religious groups, was countered with the old argument that Ford could do more for race relations in South Africa by remaining there.

Other US companies have in fact pulled out – Polaroid being the most notable example. But Ford is determined to stay as long as it is profitable to do so. The alacrity with which it pulled out of Chile, India and Peru when conditions didn't suit it shows how fast it can move if it wants to.

2.11.76). The Venezuelan economy, cushioned by large oil exports, has not been immune from the fluctuations of the world economy, but it has pulled out of recession faster than the rest of the continent.

In 1975 the Venezuelan motor industry lost around $28m, and in 1976 nearly $50m. Strict government price regulations, plus credit restrictions on the purchase of new passenger cars are hitting the big three US motor manufacturers, who between them account for some 85% of all cars assembled in Venezuela. Ford claimed a loss of $10.7m in 1975.

The Venezuelan government is trying to impose increases in the locally-manufactured content of vehicles, from 58% in 1977 to 90% by 1985. Its detailed development plan calls for outlays of about $465m, largely by the car firms, and the creation of about 20,000 new jobs in the industry. The US companies are claiming they cannot possibly afford this investment unless price restrictions are lifted – but the Venezuelan government believes that parent companies are earning money on Venezuelan sales while local affiliates accumulate bookkeeping losses.

By 1977, Venezuela's economic fortunes had recovered, and the car market was showing a rise of more than 12%. With two major aluminium projects under way, the country is set to be one of the largest producers in the world. In a personal visit, Henry Ford II said that Ford was interested in the possibility of using Venezuelan made aluminium for lighter vehicles to be manufactured in the US in the years to come. He announced an $18m investment in expansion of Ford facilities in 1978.

In 1975 Ford had retail car sales of 25,500 – up from 1974s 23,200 which was 29% of the market. Truck sales in 1974 were 12,100 or 31.8% of the market. Sales rose to 16,100 in 1975. In 1976 total sales were 31,178.

Mexico

In 1965 Ford began manufacturing cars and trucks in Mexico, under a government approved programme. At this time, the Mexican government was offering enormous investment incentives. By 1975 Ford was selling 34,700 cars, a 14.9% share of the market. The next year the Mexican car market fell some 14½%, and Ford car sales fell to 22,800 – bringing its share down to 11.4%. Trucks, however continued to grow – from 23,166 in 1975 to 24,360 in 1976. This despite the fact that the truck market fell 10%. Ford's market share rose from 19.8% to 23.2%.

Ford Asia-Pacific

'Asia-Pacific automotive operations is the smallest component of Ford's international car and truck group. However the region's vast size, growing population and significant reserves of natural resources provide the potential for rapid economic growth and substantially improved vehicles sales.' (Annual Report 1974).

With a third of the world's population, but only 2% of its cars, the Asia Pacific region seemed ripe for exploitation by Ford in the late 1960s and early 1970s. The area offered a vastly underemployed population, very low wage rates, and governments such as those in South Korea, the Philippines and Taiwan who would use military force to ensure a docile work force.

Ford Asia-Pacific, organised in 1970, co-ordinated subsidiaries in Australia, Japan, Malaysia, New Zealand, the Philippines, Thailand, Singapore, Taiwan and dealer assemblers in Korea, Indonesia and Malaysia.

In 1972 Ford Philippines introduced the Fiera – the Ford version of the 4 cylinder 1300cc 'asian car'. Based on a simple cab-and-chassis format, and available in a wide variety of body configurations, Fiera components are produced by more than 150 suppliers in the Asia-Pacific region. Body parts are made in the Philippines, engines in Korea and Taiwan, and axles and transmissions in Indonesia.

The allocation of component production is controlled solely by Ford. When a local plant begins manufacturing rather than importing a component, the price of that part is deleted from the price of the complete kit needed to assemble the vehicle. **The deleted price is far lower than the price of the part when it is imported.** A part may cost $200 to import – but the assembly package without that part may be only $60 cheaper than the complete kit. Assuming that the imported price reasonably reflects the cost of the part, then the difference of $140 is transferred as profit to the parent company although there is no actual exchange of goods.

Ford Philippines was established in 1967, and Ensite Philippines in 1971. The main task of this company was to raise funds for the stamping plant at Mariveles in the Philippines. This factory, which has a capacity of 70,000 vehicles a year, employs only 700 workers, in an area where unemployment is virtually 50%. It started production in late 1974, and uses sheet metal imported from Japan to make bodies, including Cortina bodies. During 1976, 15,000 sets of Cortina doors were exported to England. Body parts are also exported to Australia, New Zealand, Taiwan and Singapore.

In Taiwan, Ford bought a 70% interest in the Lio Ho Motor Company from Toyota in 1972, as Japan withdrew from Taiwan as Sino-Japanese relations improved.

Between 1968 and 1974 Ford's sales in the Asia-Pacific region had increased 150%, and in 1974 they rose a further 11%. In 1974 Ford predicted a 36% increase in the auto market (excluding Japan) between 1975 and 1980. However, 1975 saw a decline in the car market (excluding Japan) of 2%, and Ford car sales down by 8%. 1976 was even worse, and Ford sales fell by $4 m.

Ford Australia

Australia is Ford's principal marketing and manufacturing centre in the region, and the management of most of the subsidiaries in the area is Australian. It was in 1925 that Ford of Canada established an assembly plant at Geelong in Victoria, and even today the ownership of many of the Ford companies in the area is via Ford of Canada and Ensite Ltd. of Canada – both of course owned finally by Ford.

Retail Sales in Australia: Ford cars and trucks

	Cars	*%*	*Trucks*	*%*
1976	103,936	22.4	26,360	19.1
1975	101,400	21.7	24,700	20.3
1974	108,700	23.0	22,300	19.5

By August 1977, Ford had gained market leadership, for the first time since the 1950s.

In 1975 Ford employed 12,000 workers in Australia in the following plants: Homebush, Sydney (assembly); Geelong, Victoria (foundry); Ballorat, Victoria; Broadmeadows, Victoria (assembly); and Eagle Farm, Queensland (assembly). Homebush assembled the Escort, and Eagle Farm the Falcon. Ford also sells the Fairlane, Cortina and LTD models.

Expansion

In 1975, Ford Australia produced its two millionth car. The casting plant at Geelong completed a modernisation programme, and the Homebush assembly plant was expanded. Sales of the new Escort assembled from kits imported from Halewood, UK, were a notable success.

In 1976, Ford announced a three year $77m programme for product development, towards 'an all-Australian car' – a replacement for the Falcon. In May 1977 a new A$82m assembly plant outside Sydney to assemble Falcons and Fairlanes was announced. Its initial capacity will be 30,000 units a year, with possible expansion to 100,000 a year.

The Australian market has been increasingly penetrated by imports – especially from Japan, and an attempt to increase local production by imposing local-content strictures and import tariffs is under way. Previous such attempts have been notably unsuccessful.

Ready built imports as % of new registrations

1974	31.8
1973	14.3
1972	8.5

In 1976 Ford of Australia reported a net profit of A$22.5m, a record, and almost A$4m higher than in 1975. Since 1970 sales had risen by $397m to $776m.

Ford Japan

"... what burns me up is that I can't go into Japan. We can't build, we can't sell, we can't service, we can't do a damn thing over there." (Henry Ford II)

Japan is the only major western car market that Ford has not yet penetrated to any significant extent, but since 1973 it has been taking steps to try and alter this. In 1974 it set up a subsidiary Ford of Japan, capitalised at Y250m to take care of Ford sales, and the unused plant at Yokohama was refurbished as a 'homologation' centre, to monitor Japanese regulations on emission control, and ensure that imported vehicles concurred. In 1974 the retail sales of Ford built cars were 6,800, compared to 6000 the year before. Clearly these numbers are tiny, in terms of Ford's volumes of production – but compared to the total number of foreign cars imported into Japan, less than 40,000 a year, they are not insignificant.

In 1975 Ford signed a sales agreement with Hisco, a subsidiary of Honda, Japan's fourth largest car maker. In 1977 this agreement was brought into action, with the import of Cortina Ghias from the UK, and 1.6 litre Fiestas from Germany. The cars will be distributed by 100 of Honda's sub-dealers throughout Japan. This is not the full Honda dealer network, but nevertheless will give the two cars a bigger nationwide coverage than any other imported cars except those bought by Yanase, which specialises in imports and has several competing makes at once.

Sales targets are 1750 Fiestas a year, and 700 to 1000 Cortinas a year, plus an increase in the 2000 or so Mustangs, Bobcats and Monarchs from the US that Hisco have been selling.

Ford is the only American major which has no direct capital stake in a Japanese motor company. General Motors has a minority interest in Isuzu, Chrysler a holding in Mitsubishi Motor Company. In the late 1960s Ford had merger talks with Toyo Kyogo, but these broke down over the size of the Ford shareholding under the merger. Toyo Kyogo stands midway between the two top Japanese car makers, Toyota and Nissan, which are too powerful to admit foreign capital participation, and the smaller weaker companies which are increasingly moving into the orbit of the American motor industry.

The links with Toyo Kyogo were not completely severed, and the company manufactures the Courier light truck for Ford, which is imported into the US, in a 1.8 litre version manufactured entirely in Japan, and a 2.3 litre model, using engines exported from Ford Brazil.

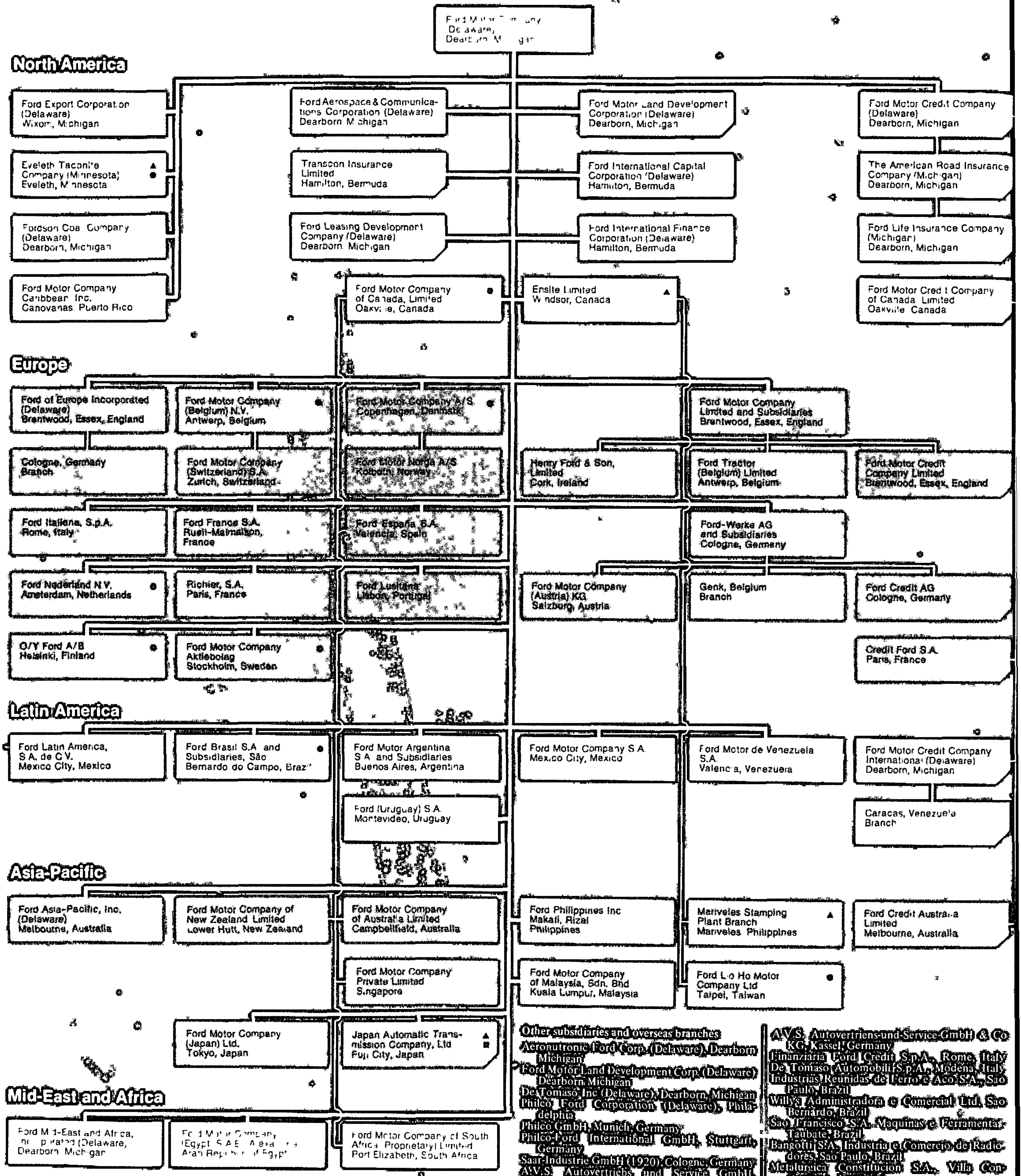
The microcomputers that control fuel emission, re-cycling ratio, ignition timing and other functions in Ford's 1978 models are manufactured in Japan by Toshiba.

Ford Middle East and Africa

In 1975 a new subsidiary was formed, Ford Mid-East and Africa, Inc, 'to develop markets that have a common product interest and a capability of trading with each other.' The most important markets covered by the group are Morocco, Pakistan, Turkey, Senegal and Ghana, several of which have dealer-assembly, and there are subsidiaries in Egypt and South Africa.

The South African company accounts for almost half the sales in this group – Ford of South Africa is discussed elsewhere in this report. The further development of Ford's Mid-East penetration depends above all on political developments in the area.

Principal Subsidiaries and Overseas Branches



Ford Motor Company
Delaware,
Dearborn, Michigan

North America

Ford Export Corporation
(Delaware)
Wixom, Michigan

Eveleth Taconite ▲ ●
Company (Minnesota)
Eveleth, Minnesota

Fordson Coal Company
(Delaware)
Dearborn, Michigan

Ford Motor Company
Caribbean Inc.
Canovanas, Puerto Rico

Ford Aerospace & Communications Corporation (Delaware)
Dearborn Michigan

Transcon Insurance
Limited
Hamilton, Bermuda

Ford Leasing Development
Company (Delaware)
Dearborn, Michigan

Ford Motor Company ●
of Canada, Limited
Oakville, Canada

Ford Motor Land Development
Corporation (Delaware)
Dearborn, Michigan

Ford International Capital
Corporation (Delaware)
Hamilton, Bermuda

Ford International Finance
Corporation (Delaware)
Hamilton, Bermuda

Ensite Limited ▲
Windsor, Canada

Ford Motor Credit Company
(Delaware)
Dearborn, Michigan

The American Road Insurance
Company (Michigan)
Dearborn, Michigan

Ford Life Insurance Company
(Michigan)
Dearborn, Michigan

Ford Motor Credit Company
of Canada, Limited
Oakville, Canada

Europe

Ford of Europe Incorporated
(Delaware)
Brentwood, Essex, England

Cologne, Germany
Branch

Ford Italiana, S.p.A.
Rome, Italy

Ford Nederland N.V. ●
Amsterdam, Netherlands

O/Y Ford A/B ●
Helsinki, Finland

Ford Motor Company ●
(Belgium) N.V.
Antwerp, Belgium

Ford Motor Company
(Switzerland) S.A.
Zurich, Switzerland

Ford France S.A.
Rueil-Malmaison,
France

Richier, S.A.
Paris, France

Ford Motor Company ●
Aktiebolag
Stockholm, Sweden

Ford Motor Company A/S ●
Copenhagen, Denmark

Ford Motor Norge A/S
Kolbotn, Norway

Ford España S.A.
Valencia, Spain

Ford Lusitana
Lisbon, Portugal

Ford Motor Company
Limited and Subsidiaries
Brentwood, Essex, England

Henry Ford & Son,
Limited
Cork, Ireland

Ford Tractor
(Belgium) Limited
Antwerp, Belgium

Ford Motor Credit
Company Limited
Brentwood, Essex, England

Ford-Werke AG
and Subsidiaries
Cologne, Germany

Ford Motor Company
(Austria) KG
Salzburg, Austria

Genk, Belgium
Branch

Ford Credit AG
Cologne, Germany

Credit Ford S.A.
Paris, France

Latin America

Ford Latin America,
S.A. de C.V.
Mexico City, Mexico

Ford Brasil S.A. and ●
Subsidiaries, São
Bernardo do Campo, Brazil

Ford Motor Argentina
S.A. and Subsidiaries
Buenos Aires, Argentina

Ford (Uruguay) S.A.
Montevideo, Uruguay

Ford Motor Company S.A.
Mexico City, Mexico

Ford Motor de Venezuela
S.A.
Valencia, Venezuela

Ford Motor Credit Company
International (Delaware)
Dearborn, Michigan

Caracas, Venezuela
Branch

Asia-Pacific

Ford Asia-Pacific, Inc.
(Delaware)
Melbourne, Australia

Ford Motor Company of
New Zealand Limited
Lower Hutt, New Zealand

Ford Motor Company
(Japan) Ltd.
Tokyo, Japan

Ford Motor Company
of Australia Limited
Campbellfield, Australia

Ford Motor Company
Private Limited
Singapore

Japan Automatic Transmission Company, Ltd ▲ ■
Fuji City, Japan

Ford Philippines Inc
Makati, Rizal
Philippines

Ford Motor Company
of Malaysia, Sdn. Bhd
Kuala Lumpur, Malaysia

Mariveles Stamping ▲
Plant Branch
Mariveles, Philippines

Ford Lio Ho Motor ●
Company Ltd
Taipei, Taiwan

Ford Credit Australia
Limited
Melbourne, Australia

Mid-East and Africa

Ford Mid-East and Africa,
Incorporated (Delaware),
Dearborn, Michigan

Ford Motor Company
(Egypt) S.A.E. Alexandria
Arab Republic of Egypt

Ford Motor Company of South
Africa (Proprietary) Limited
Port Elizabeth, South Africa

Legend

● Indicates subsidiaries in which there is an outstanding minority interest. All other subsidiaries are wholly or substantially wholly owned by Ford Motor Company or by its subsidiaries.

▭ Consolidated

▭ Unconsolidated

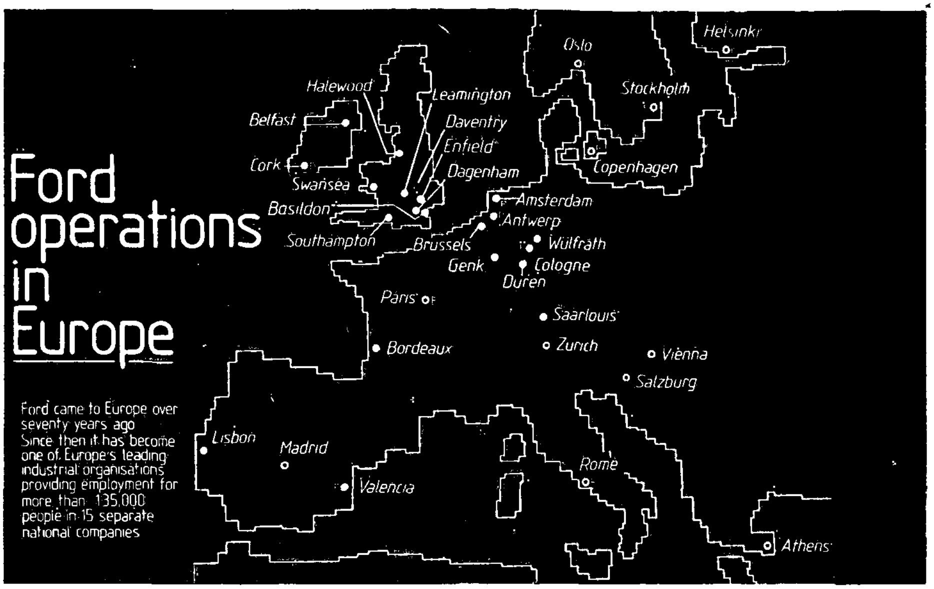
Other subsidiaries and overseas branches

- Aeronutronic Ford Corp. (Delaware), Dearborn Michigan
- Ford Motor Land Development Corp. (Delaware) Dearborn, Michigan
- De Tomaso Inc (Delaware), Dearborn, Michigan
- Philco Ford Corporation (Delaware), Philadelphia
- Philco GmbH, Munich, Germany
- Philco-Ford International GmbH, Stuttgart, Germany
- Saar-Industrie GmbH (1920), Cologne, Germany
- A.V.S. Autovertriebs und Service GmbH, Kassel, Germany
- Ford Investitions GmbH & Co OHG, Cologne, Germany
- Ford Investitions GmbH, Cologne, Germany
- Ford Versicherungs-Vermittkungsgesellschaft mbH, Cologne, Germany
- Ford Versorungs-u.Unterstutzungs-Einrichtung GmbH, Cologne, Germany
- A.V.S. Autovertriens-und-Service-GmbH & Co KG, Kassel, Germany
- Finanziaria Ford Credit S.p.A., Rome, Italy
- De Tomaso Automobili S.p.A., Modena, Italy
- Industrias Reunidas de Ferro e Aco S.A., Sao Paulo, Brazil
- Willys Administradora e Comercial Ltd, Sao Bernardo, Brazil
- Sao Francisco S.A. Maquinas e Ferramentas, Taubate, Brazil
- Bangotti S.A. Industria e Comercio de Radiodores, Sao Paulo, Brazil
- Metalurgica Constitucion S.A., Villa Constitucion, Argentina
- Transax S.A., Comercial, Industrial y Financiera, Cordoba, Argentina
- Ford Motor Co. (Thailand) Ltd., Bangkok, Thailand

40% interests

- Maserati, Modena, Italy
- Escort Tractors Ltd., New Delhi, India

Ford operations in Europe



Ford came to Europe over seventy years ago Since then it has become one of Europe's leading industrial organisations providing employment for more than 135,000 people in 15 separate national companies

Amsterdam (Netherlands)

Assembly Taunus and Transcontinental Truck ranges.

Antwerp (Belgium)

Ford Tractor, rear axle and transmission production. Final assembly Tractors.

Basildon (England)

Ford Tractor engine production, hydraulic heavy equipment. Final assembly Tractors.

Basildon (England)

Processes engine parts, front covers, valve rockers, cam followers, water pump assemblies for Kent, Essex, O.H.C. and Fiesta engine ranges. Similar parts for Dorset and York commercial vehicle engine ranges.

Radiator assemblies for Escort, Fiesta, Cortina, Capri, Granada, Transit, A/D/N Series Truck ranges.

Suspension and rear axle components for Escort, Cortina, Capri, Granada A/D/N Series Truck ranges.

Belfast (Northern Ireland)

Carburettor and distributor production for all European Ford petrol engines. Units used in Escort, Fiesta, Cortina, Taunus, Capri, Granada, Transit and A-Series.

Bordeaux (France)

C3 Automatic Transmissions for Escort, Cortina, Taunus, Capri, Granada and Transit. C3 Automatics also shipped to USA for installation in Pinto and Mustang ranges.

Transaxle Plant produces transmissions for all Fiestas.

Cologne (West Germany)

Final assembly of Capri and Granada models.

Trim for Capri, Granada, Escort and Taunus.

Fuel tanks for Granada.

Chrome plating of bumpers for Escort, Fiesta, Capri, Taunus, Granada and Transit.

Plastic parts for Escort, Fiesta, Capri, Cortina, Taunus, Granada and Transit. Engine production for Taunus, Cortina, Capri, Granada and Transit.

Engine parts for Fiesta.

Engines also supplied to USA for Pinto and Mustang.

Suspension transmission and brake components for Escort, Taunus, Capri, Granada and Transit.

Forgings for brake and transmission components for Escort, Taunus, Capri, Granada and Transit.

Gear components for Fiesta.

Aluminium die castings for engines installed in Escort, Taunus, Capri, Granada and Transit.

Die cast transaxle casings for Fiesta.

Cork (Ireland)

Final assembly Escort, Cortina.

Dagenham (England)

Final assembly Cortina and Fiesta models. Trim production for Escort, Cortina, Transit, A/D/N Series truck ranges, Fuel tanks for Cortina and Granada.

Stamping plant produces body panels for Escort, Fiesta, Cortina, Taunus, Capri, Granada, A/D/N Series Truck ranges. Wheel production for Escort, Capri, Cortina, Granada and Transit.

Engine production for Escort, Cortina, Taunus, Fiesta, Capri, Granada, Transit, A/D/N Series truck ranges.

Engine parts also produced for above models.

Forgings for Escort, Cortina, Capri, Granada, Transit, A/D/N Series truck ranges. Suspension components.

Foundry production of engine castings for Escort, Fiesta, Cortina, Taunus, Capri, Granada, Transit, A/D/N Series truck ranges.

Duren (West Germany)

Rear axle production for Escort, Taunus, Cortina, Capri, Granada and Transit. Wheel hubs for Escort, Taunus, Capri, Granada and Transit.

Enfield (England)

Instruments, fuel gauge sender units, water temperature gauge sender units, engine spark plugs for Escort, Fiesta, Cortina, Taunus, Capri, Granada, Transit, A/D/N Series Truck ranges.

Genk (Belgium)

Final assembly Taunus and Transit models.

Trim production for Escort, Taunus, Transit.

Fuel tanks for Taunus.

Road wheels for Escort, Fiesta, Capri, Taunus, Granada, Transit.

Stamping plant produces body panels for Escort, Fiesta, Taunus, Cortina, Capri, Granada, Transit, A/D/N Series truck ranges.

Halewood (England)

Final assembly Escort.

Trim production for Escort, Cortina, Transit, A/D/N Series truck ranges.

Fuel tanks for Escort.

Stamping plant produces body panels for Escort Taunus, Cortina, Capri, Granada, Transit, A/D/N Series Truck ranges.

Transmissions for Escort, Cortina, Taunus, Capri, Granada, Transit, A/D/N Series Truck ranges.

Engine gear wheels for Escort, Cortina, Capri, Granada, Transit, A/D/N Series truck ranges.

Suspension components for Escort, Cortina, Capri, Granada, Transit, A/D/N Series Truck ranges.

Langley (England)

Final assembly A/D/N/R Series commercial vehicles.

Machining axle and suspension components for Transit, A/D/N/R Series commercial vehicles.

Leamington (England)

Foundry production of engine components for Fiesta, Kent, Essex, O.H.C., Dorset, York engine ranges.

Brake parts for Escort, Cortina, Capri, Granada, Transit, A/D/N Series Truck ranges.

Transmission housings for Escort, Cortina, Capri, Granada, A/D/N Series Truck ranges.

Lisbon (Portugal)

Final assembly of Escort, Cortina, Capri, Granada, Transit and D-Series truck ranges.

Saarlouis (Western Germany)

Final assembly Escort, Fiesta, Capri.

Trim production for Escort, Fiesta, Capri.

Fuel tanks for Escort, Fiesta, Capri.

Stamping plant produces body panels for Escort, Fiesta, Taunus, Cortina, Capri, Granada, Transit, A/D/N Series truck ranges.

Southampton (England)

Final assembly Transit.

Body assembly for A and S-Series Truck ranges.

Stamping plant produces body panels for Transit, A/D/N Series truck range and Cortina.

Swansea (South Wales)

Rear axle production for Escort, Cortina, Capri, Granada, Transit, A/D/N Series Truck ranges.

Brake components for Escort, Cortina, Capri, Granada, Transit, and A-Series commercial vehicles.

Gearbox production for A/D/N Series Truck ranges.

Treforest (South Wales)

Spark plug insulators for all Ford petrol engines.

Valencia (Spain)

Final assembly Fiesta.

Trim production for Fiesta.

Stamping plant produces body panels for Fiesta.

Fiesta engine production.

Woolwich (England)

Engine parts for Escort and Cortina models.

Transmission parts for Escort, Cortina, Capri, Transit, A/D/N Series truck ranges.

Wuelrath (Western Germany)

Transmission parts for Fiesta.

Suspension and steering components for Escort Fiesta, Taunus, Capri, Granada and Transit.

Prospects

"There are too many car manufacturers fighting over the world market."

In 1974 the world's motor manufacturers were faced with the unthinkable. After the previous year's record figures, sales plummeted, and cars started to pile up in the parking areas of Detroit and Wolfsburg.

As the recession deepened around the world, the stockpiles of cars grew, and by 1975 practically every car manufacturer had imposed short time working and had got rid of large numbers of workers. In 1974 Ford shed 50,000 workers, British Leyland got rid of 28,000 and as the Volkswagen factories shut down migrant workers were sent back to Morocco and Turkey.

The two years of recession, deeper than any car manufacturer's worst nightmares, were traumatic for the whole industry. Even previously successful Volkswagen looked over the edge of bankruptcy, and Chrysler, smallest of the American big three, was driven deep into the red. For firms like British Leyland, it meant disaster and rescue by the state.

For the stronger motor companies the worst is apparently over. Profits are reaching new records, despite the fact that sales are still below their 1973 peaks, and most manufacturers are entering the 1980s with new model ranges. Investments are being stepped up. Over $50-billion is to be spent in the USA by 1985 to downsize the model ranges of the big three car makers. A total of nearly £7billion will be invested by motor makers in Europe between now and 1982.

This apparently healthy situation is only skin deep, for most of the new investment is not going into new manufacturing capacity, but into raising productivity or refining engines and components to improve fuel economy and exhaust emissions. The fundamental problems of overcapacity that emerged during the recession have still not been solved. There are too many car manufacturers fighting over the world market, and the prospects for real growth in the near future are far from certain.

Unemployment in the OECD area, the leading industrial nations is currently at 16.3million and expected to rise. Growth in plant and machinery investment will rise only moderately in most countries in 1978, and the US economy, saddled with an enormous trade deficit will grow more slowly in 1978 than it did in 1977. Forecasters are predicting that US car sales will fall by 6% in 1978. Japan's growth is expected to be just 1%, Europe's under 3%. 'Only major new pump priming can prevent Europe, Japan and Canada from slipping to the brink of recession by the end of the year,' wrote *Business Week* at the end of 1977. Yet pump priming is the last thing that most governments, fearful of renewed inflation, are about to undertake.

Popperfoto

What this means for the motor manufacturers is that any growth in the car market from its present levels is highly speculative, and that competition is going to be more fierce than ever before.

Ford, with its integrated production and the related economies of scale, and its aggressive production and marketing techniques, is in a very strong competitive position. The addition of the Fiesta and the luxury Granada means that it is competing in Europe over the full model range – threatening not only the popular car producers but also the luxury car makers.

It is precisely in periods of depressed or stagnant demand that Ford is most dangerous to other makers. Their competitive edge is such that Ford can sell all the cars it can produce – when the market is not growing fast this is at the expense of other manufacturers. Ford has the added advantages of access to American capital, its sheer size compared to its European competitors and the fact that it is not tied to any one European country.

The companies that have emerged from the recession in worse shape than they entered it are going to be hit even harder in the near future. This must mean further closures and redundancies as the industry is reorganised in the interests of capital. Already rumours are rife that British Leyland plans to axe a quarter of its workers. In the short term it will mean constant pressure by the employers on wage levels, productivity and flexibility of labour, and workers' organisation. We can confidently predict that Ford will be in the forefront of this employers' offensive.

Ford workers have proved their militancy and organisational ability at plant level in the past. Only by extending their fightback on international lines can they resist the depredations of what has now become the most global of global corporations.

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